

itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

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REPORT NUMBER: ITL86238

PAGE: 1 OF 7

ISSUE DATE: 12/29/15

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: MN-LED-e69-MFL-13-C, SN-MN-LED-e69-MFL-13, ST-MN-LED-e69-MFL-13,
SF-MN-LED-e69-MFL-13, TF-MN-LED-e69-MFL-13, RM-MN-LED-e69-MFL-13,
PM-MN-LED-e69-MFL-13, WM-MN-LED-e69-MFL-13, SM-MN-LED-e69-MFL-13,
CH-LED-e69-MFL-13

LUMINAIRE: MACHINED CYLINDRICAL METAL HOUSING, 1 BLACK CIRCUIT BOARD WITH 3 LEDS,
ONE CLEAR PRISMATIC PLASTIC LENS WITH ONE CONICAL OPTIC PER LED WITH
SEMI-HEMISPHERICAL RECESSED CENTER TOWARD LED, CLEAR LINEAR-PRISMATIC FLAT
GLASS LENS IN MACHINED CYLINDRICAL BLACK PAINTED METAL LENS FRAME. LENS PRISMS
OUT AND VERTICAL. LUMINAIRE AIMED AT THE HORIZON FOR THIS TEST.

LAMPS: THREE WHITE LIGHT EMITTING DIODES (LEDs), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 12.0 VOLTS, 6.47 WATTS, 0.597 AMPS

LED DRIVER: B-K LIGHTING 524438/400188-L

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (12VAC,
60Hz) TO THE DRIVER.

TEST PROCEDURE: IESNA LM-79-08

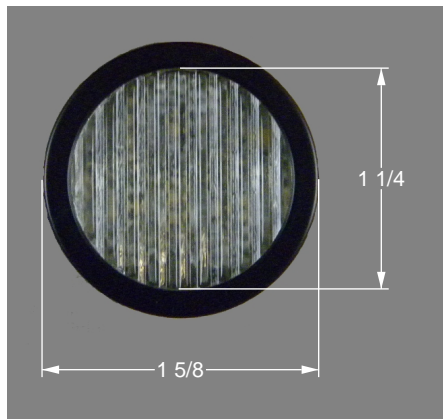
TEST DISTANCE = 20.0 FEET

FLOODLIGHT CHARACTERISTICS

AXIAL CANDLEPOWER

IES TYPE 5H X 4V
MAXIMUM CANDLEPOWER 795. AT 0.0 H, 0.0 V
HORIZONTAL BEAM ANGLE (50%) 55.6 deg
VERTICAL BEAM ANGLE (50%) 23.3 deg
HORIZONTAL FIELD ANGLE (10%) 88.6 deg
VERTICAL FIELD ANGLE (10%) 49.9 deg
BEAM LUMENS (% FIXTURE) 174. (46.6 %)
FIELD LUMENS (% FIXTURE) 314. (83.8 %)
TOTAL LUMENS (% FIXTURE) 374. (100.0 %)
EFFICACY = 57.8 lm/W

DEG	HORIZ.	DEG	VERT.
90.0	0.	90.0	0.
85.0	1.	85.0	0.
75.0	5.	75.0	2.
65.0	8.	65.0	6.
55.0	10.	55.0	10.
47.5	43.	47.5	15.
42.5	100.	42.5	19.
37.5	177.	37.5	26.
33.0	271.	33.0	36.
29.0	369.	29.0	51.
25.5	453.	25.5	73.
22.5	515.	22.5	102.
19.5	569.	19.5	149.
17.0	609.	17.0	204.
15.0	640.	15.0	261.
13.0	669.	13.0	332.
11.0	694.	11.0	415.
9.0	717.	9.0	507.
7.0	741.	7.0	599.
5.0	763.	5.0	686.
3.0	781.	3.0	752.
1.0	793.	1.0	789.
0.0	795.	0.0	795.
-1.0	793.	-1.0	791.
-3.0	781.	-3.0	760.
-5.0	763.	-5.0	700.
-7.0	741.	-7.0	621.
-9.0	717.	-9.0	534.
-11.0	694.	-11.0	432.
-13.0	669.	-13.0	349.
-15.0	640.	-15.0	276.
-17.0	609.	-17.0	216.
-19.5	569.	-19.5	157.
-22.5	515.	-22.5	107.
-25.5	453.	-25.5	75.
-29.0	369.	-29.0	51.
-33.0	271.	-33.0	35.
-37.5	177.	-37.5	25.
-42.5	100.	-42.5	19.
-47.5	43.	-47.5	15.
-55.0	10.	-55.0	12.
-65.0	8.	-65.0	6.
-75.0	5.	-75.0	2.
-85.0	1.	-85.0	0.
-90.0	0.	-90.0	0.



Checked *B HYRE*

Approved *R BEATTIE*
Lighting Engineer

ALL CANDELA AND LUMEN VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY.

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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PAGE: 2 OF 7

CANDELA TABULATION

AVERAGE OF RIGHT AND LEFT SIDES

	0.0	1.0	3.0	5.0	7.0	9.0	11.0	13.0	15.0	17.0	19.5	22.5	25.5	29.0	33.0	37.5	42.5	47.5	55.0	65.0	75.0	85.0	90.0
90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75.0	2.	2.	3.	2.	3.	3.	3.	3.	3.	3.	3.	2.	2.	2.	2.	3.	2.	2.	2.	1.	0.	0.	0.
65.0	6.	6.	6.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	3.	2.	1.	0.	0.
55.0	10.	10.	10.	10.	10.	10.	9.	8.	8.	8.	8.	8.	8.	8.	8.	6.	5.	5.	4.	4.	2.	0.	0.
47.5	15.	15.	15.	15.	15.	15.	15.	15.	14.	14.	13.	12.	11.	11.	11.	9.	7.	6.	6.	4.	2.	0.	0.
42.5	19.	19.	20.	20.	20.	20.	20.	19.	19.	19.	18.	17.	15.	14.	14.	12.	9.	7.	7.	4.	3.	0.	0.
37.5	26.	26.	26.	26.	26.	26.	26.	26.	26.	25.	25.	24.	23.	20.	18.	16.	12.	9.	7.	5.	3.	0.	0.
33.0	36.	36.	36.	36.	36.	36.	36.	36.	35.	35.	34.	33.	32.	29.	25.	22.	16.	11.	8.	5.	3.	0.	0.
29.0	51.	51.	52.	52.	52.	51.	51.	51.	50.	49.	47.	46.	44.	40.	34.	28.	20.	12.	8.	5.	4.	1.	0.
25.5	73.	73.	74.	74.	73.	71.	70.	71.	70.	69.	66.	63.	59.	53.	45.	36.	26.	14.	8.	6.	4.	1.	0.
22.5	102.	101.	103.	103.	102.	100.	98.	97.	96.	94.	89.	83.	78.	69.	58.	46.	32.	16.	9.	6.	4.	1.	0.
19.5	149.	150.	149.	147.	145.	141.	138.	136.	133.	129.	121.	113.	105.	93.	77.	59.	39.	20.	9.	6.	4.	1.	0.
17.0	204.	205.	203.	200.	196.	192.	186.	183.	177.	172.	161.	150.	138.	120.	98.	73.	47.	23.	9.	7.	4.	1.	0.
15.0	261.	259.	260.	256.	251.	244.	237.	233.	225.	217.	204.	188.	173.	148.	118.	86.	55.	26.	9.	7.	4.	1.	0.
13.0	332.	330.	331.	325.	318.	309.	300.	293.	283.	272.	256.	234.	212.	180.	142.	101.	63.	29.	10.	7.	4.	1.	0.
11.0	415.	414.	408.	406.	397.	386.	374.	363.	351.	335.	312.	286.	258.	217.	168.	117.	71.	32.	10.	7.	5.	1.	0.
9.0	507.	508.	501.	490.	480.	466.	456.	439.	421.	404.	377.	344.	308.	256.	195.	133.	79.	35.	10.	7.	5.	1.	0.
7.0	599.	602.	595.	582.	568.	546.	527.	516.	491.	473.	438.	401.	358.	294.	221.	148.	87.	38.	10.	7.	5.	1.	0.
5.0	686.	687.	678.	663.	642.	622.	601.	585.	556.	532.	497.	453.	402.	328.	244.	161.	93.	41.	10.	8.	5.	1.	0.
3.0	752.	752.	741.	723.	702.	681.	657.	635.	608.	580.	541.	491.	432.	353.	260.	171.	97.	42.	10.	8.	5.	1.	0.
1.0	789.	788.	775.	759.	736.	713.	689.	663.	636.	606.	566.	513.	451.	367.	269.	176.	100.	43.	10.	8.	5.	1.	0.
0.0	795.	793.	781.	763.	741.	717.	694.	669.	640.	609.	569.	515.	453.	369.	271.	177.	100.	43.	10.	8.	5.	1.	0.
-1.0	791.	789.	776.	761.	737.	714.	692.	667.	639.	606.	567.	513.	451.	367.	270.	177.	100.	43.	10.	8.	5.	1.	0.
-3.0	760.	760.	747.	731.	709.	687.	662.	641.	613.	583.	545.	493.	436.	357.	262.	173.	98.	43.	10.	8.	5.	1.	0.
-5.0	700.	699.	690.	674.	651.	631.	611.	590.	565.	540.	504.	459.	405.	334.	247.	164.	94.	41.	10.	8.	5.	1.	0.
-7.0	621.	620.	613.	594.	579.	561.	544.	525.	505.	482.	448.	413.	366.	303.	227.	152.	88.	39.	10.	7.	5.	1.	0.
-9.0	534.	533.	522.	512.	498.	483.	468.	453.	436.	415.	387.	355.	317.	266.	203.	137.	81.	36.	10.	7.	4.	1.	0.
-11.0	432.	437.	432.	425.	416.	403.	390.	379.	365.	349.	326.	300.	269.	228.	175.	122.	73.	33.	9.	7.	4.	1.	0.
-13.0	349.	347.	348.	344.	338.	328.	317.	309.	298.	286.	268.	248.	224.	191.	148.	106.	65.	30.	9.	7.	4.	1.	0.
-15.0	276.	274.	275.	271.	268.	261.	253.	247.	239.	230.	217.	201.	181.	155.	124.	89.	57.	26.	9.	7.	4.	1.	0.
-17.0	216.	213.	215.	212.	209.	205.	199.	193.	188.	181.	172.	159.	145.	126.	102.	75.	49.	23.	9.	7.	4.	1.	0.
-19.5	157.	154.	156.	154.	151.	148.	146.	143.	139.	134.	127.	118.	109.	96.	79.	60.	40.	19.	8.	6.	4.	1.	0.
-22.5	107.	105.	105.	105.	104.	102.	100.	99.	97.	94.	90.	84.	77.	68.	58.	45.	31.	15.	8.	6.	4.	1.	0.
-25.5	75.	73.	74.	73.	72.	71.	70.	69.	68.	66.	64.	60.	55.	50.	43.	35.	24.	12.	7.	5.	4.	1.	0.
-29.0	51.	51.	51.	50.	49.	49.	49.	48.	47.	46.	44.	41.	39.	34.	31.	26.	18.	10.	7.	5.	3.	0.	0.
-33.0	35.	35.	35.	34.	34.	34.	34.	34.	33.	32.	31.	28.	27.	24.	22.	18.	13.	8.	6.	5.	3.	0.	0.
-37.5	25.	25.	25.	25.	25.	25.	24.	24.	23.	23.	21.	20.	19.	17.	16.	13.	9.	6.	6.	4.	3.	0.	0.
-42.5	19.	19.	19.	19.	19.	19.	18.	18.	17.	17.	16.	15.	13.	12.	11.	9.	7.	5.	5.	4.	2.	0.	0.
-47.5	15.	15.	15.	15.	15.	15.	14.	13.	13.	12.	11.	10.	10.	9.	9.	7.	5.	5.	4.	3.	2.	0.	0.
-55.0	12.	12.	11.	11.	11.	10.	9.	9.	8.	8.	7.	7.	7.	7.	6.	4.	4.	4.	3.	3.	1.	0.	0.
-65.0	6.	6.	6.	6.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	3.	3.	3.	3.	2.	2.	1.	0.	0.
-75.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	1.	1.	1.	1.	0.	0.	0.
-85.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
-90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

BEAM EDGE = 398. CP = 50% OF MAX
FIELD EDGE = 80. CP = 10% OF MAX

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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PAGE: 3 OF 7

CANDELA TABULATION - FIELD ONLY

AVERAGE OF RIGHT AND LEFT SIDES

	0.0	1.0	3.0	5.0	7.0	9.0	11.0	13.0	15.0	17.0	19.5	22.5	25.5	29.0	33.0	37.5	42.5	47.5	55.0	65.0	75.0	85.0	90.0
90.0																							
85.0																							
75.0																							
65.0																							
55.0																							
47.5																							
42.5																							
37.5																							
33.0																							
29.0																							
25.5																							
22.5	102.	101.	103.	103.	102.	100.	98.	97.	96.	94.	89.	83.											
19.5	149.	150.	149.	147.	145.	141.	138.	136.	133.	129.	121.	113.	105.	93.									
17.0	204.	205.	203.	200.	196.	192.	186.	183.	177.	172.	161.	150.	138.	120.	98.								
15.0	261.	259.	260.	256.	251.	244.	237.	233.	225.	217.	204.	188.	173.	148.	118.	86.							
13.0	332.	330.	331.	325.	318.	309.	300.	293.	283.	272.	256.	234.	212.	180.	142.	101.							
11.0	415.	414.	408.	406.	397.	386.	374.	363.	351.	335.	312.	286.	258.	217.	168.	117.							
9.0	507.	508.	501.	490.	480.	466.	456.	439.	421.	404.	377.	344.	308.	256.	195.	133.							
7.0	599.	602.	595.	582.	568.	546.	527.	516.	491.	473.	438.	401.	358.	294.	221.	148.	87.						
5.0	686.	687.	678.	663.	642.	622.	601.	585.	556.	532.	497.	453.	402.	328.	244.	161.	93.						
3.0	752.	752.	741.	723.	702.	681.	657.	635.	608.	580.	541.	491.	432.	353.	260.	171.	97.						
1.0	789.	788.	775.	759.	736.	713.	689.	663.	636.	606.	566.	513.	451.	367.	269.	176.	100.						
0.0	795.	793.	781.	763.	741.	717.	694.	669.	640.	609.	569.	515.	453.	369.	271.	177.	100.						
-1.0	791.	789.	776.	761.	737.	714.	692.	667.	639.	606.	567.	513.	451.	367.	270.	177.	100.						
-3.0	760.	760.	747.	731.	709.	687.	662.	641.	613.	583.	545.	493.	436.	357.	262.	173.	98.						
-5.0	700.	699.	690.	674.	651.	631.	611.	590.	565.	540.	504.	459.	405.	334.	247.	164.	94.						
-7.0	621.	620.	613.	594.	579.	561.	544.	525.	505.	482.	448.	413.	366.	303.	227.	152.	88.						
-9.0	534.	533.	522.	512.	498.	483.	468.	453.	436.	415.	387.	355.	317.	266.	203.	137.	81.						
-11.0	432.	437.	432.	425.	416.	403.	390.	379.	365.	349.	326.	300.	269.	228.	175.	122.							
-13.0	349.	347.	348.	344.	338.	328.	317.	309.	298.	286.	268.	248.	224.	191.	148.	106.							
-15.0	276.	274.	275.	271.	268.	261.	253.	247.	239.	230.	217.	201.	181.	155.	124.	89.							
-17.0	216.	213.	215.	212.	209.	205.	199.	193.	188.	181.	172.	159.	145.	126.	102.								
-19.5	157.	154.	156.	154.	151.	148.	146.	143.	139.	134.	127.	118.	109.	96.									
-22.5	107.	105.	105.	105.	104.	102.	100.	99.	97.	94.	90.	84.											
-25.5																							
-29.0																							
-33.0																							
-37.5																							
-42.5																							
-47.5																							
-55.0																							
-65.0																							
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PAGE: 4 OF 7

LUMEN TABULATION

AVERAGE OF RIGHT AND LEFT SIDES

	0	2	4	6	8	10	12	14	16	18	21	24	27	31	35	40	45	50	60	70	80	90	TOTAL
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.7
60	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	1.2
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.9
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	1.1
40	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	1.5
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	1.6
31	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	2.2
27	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	2.3
24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	3.0
21	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	4.2
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	3.7
16	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	4.6
14	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	5.7
12	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	6.9
10	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	8.3
8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	9.7
6	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	10.9
4	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.9	0.8	0.7	0.8	0.8	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	11.8
2	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	1.0	0.9	0.7	0.8	0.8	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	12.4
0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	1.0	0.9	0.7	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	12.4
-2	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.9	0.8	0.7	0.8	0.8	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	11.9
-4	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	11.1
-6	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.6	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.0	9.9
-8	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.7	0.6	0.5	0.6	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	8.6
-10	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.6	0.5	0.4	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	7.3
-12	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.4	0.4	0.4	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	6.0
-14	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	4.8
-16	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.9
-18	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	4.3
-21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	3.1
-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.2
-27	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.1
-31	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.5
-35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.3
-40	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
-50	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.1
-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-90	13.4	13.3	13.0	12.7	12.3	11.8	11.4	10.9	10.4	14.4	12.9	11.4	12.4	9.3	7.8	4.6	2.1	1.6	0.9	0.3	0.0		187.1

LUMEN TOTAL THIS PAGE = 187.1



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REPORT NUMBER: ITL86238
ISSUE DATE: 12/29/15
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PAGE: 5 OF 7

LUMEN TABULATION - FIELD ONLY

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	0	2	4	6	8	10	12	14	16	18	21	24	27	31	35	40	45	50	60	70	80	90	TOTAL
90																							0.0
80																							0.0
70																							0.0
60																							0.0
50																							0.0
45																							0.0
40																							0.0
35																							0.0
31																							0.0
27																							0.0
24																							0.0
21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	2.0
18	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	3.4
16	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	3.3
14	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.3
12	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5.4
10	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	6.7
8	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	8.0
6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	9.5
4	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	10.8
2	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.9	0.8	0.7	0.8	0.8	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	11.7
0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	1.0	0.9	0.7	0.8	0.8	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	12.2
-2	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	1.0	0.9	0.7	0.8	0.8	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	12.2
-4	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.9	0.8	0.7	0.8	0.8	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	11.8
-6	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.9	0.8	0.7	0.7	0.7	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	10.9
-8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.6	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.2	9.8
-10	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.7	0.6	0.5	0.6	0.5	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0.2	8.5
-12	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.6	0.5	0.4	0.5	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	7.0
-14	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	5.7
-16	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	4.6
-18	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.5
-21	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	3.6
-24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.1
-27																							0.0
-31																							0.0
-35																							0.0
-40																							0.0
-45																							0.0
-50																							0.0
-60																							0.0
-70																							0.0
-80																							0.0
-90																							0.0
	12.2	12.0	11.8	11.4	11.0	10.6	10.2	9.8	9.3	12.8	11.5	9.6	10.4	7.1	5.3	1.9	0.0	0.0	0.0	0.0	0.0	0.0	156.9

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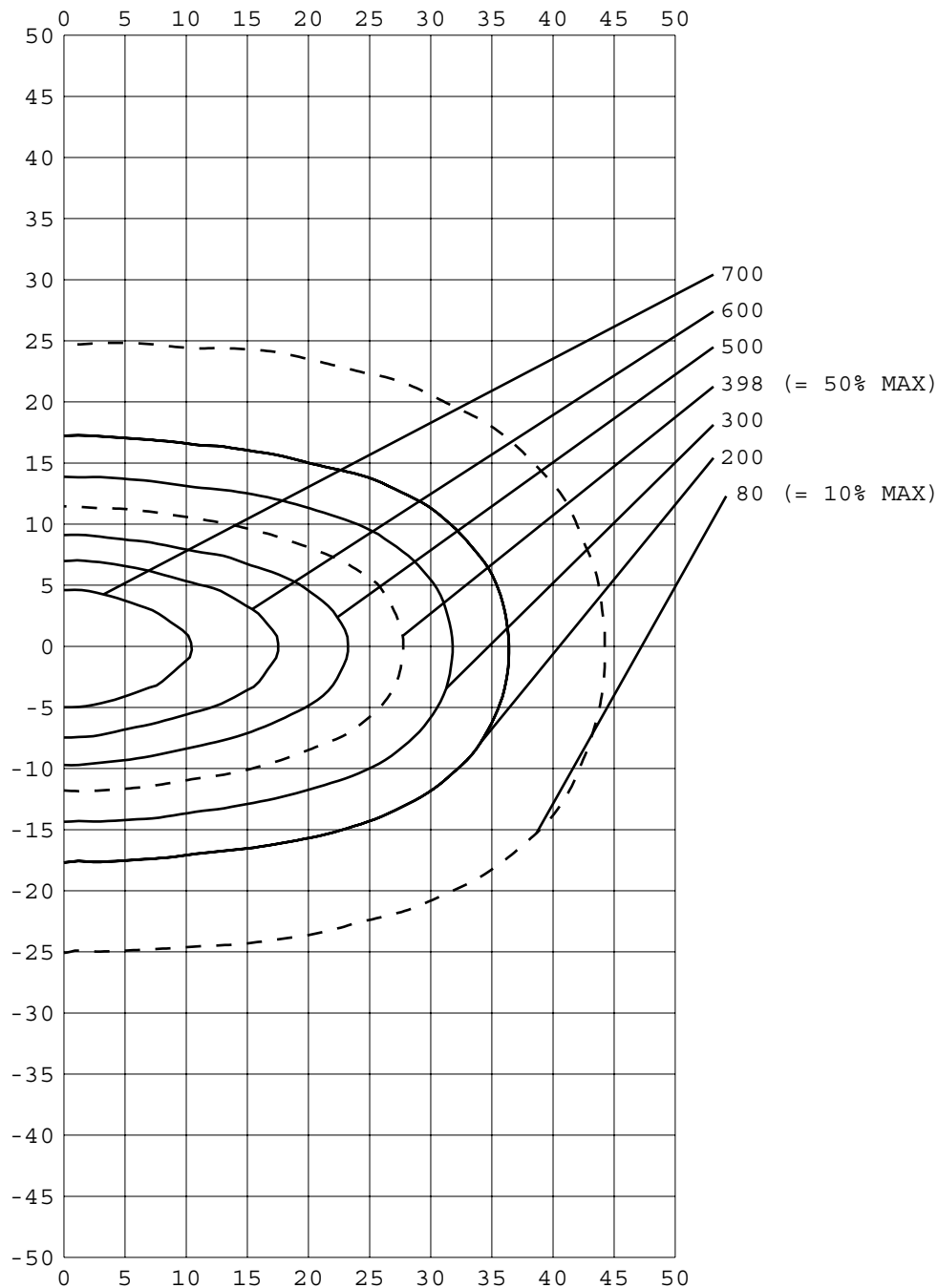
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