

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P227479

Luminaire Tested: **IST-AF-450-LED-E1-RW-7030-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227479  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29767)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: IST-AF-450-LED-E1-RW-7030-ULG  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-RECTANGULAR WIDE TYPE I, WITH UPLIGHT  
GLOW  
Light Source: (16) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4476.1 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U5 - G1

Input Watts (W): 42.01  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

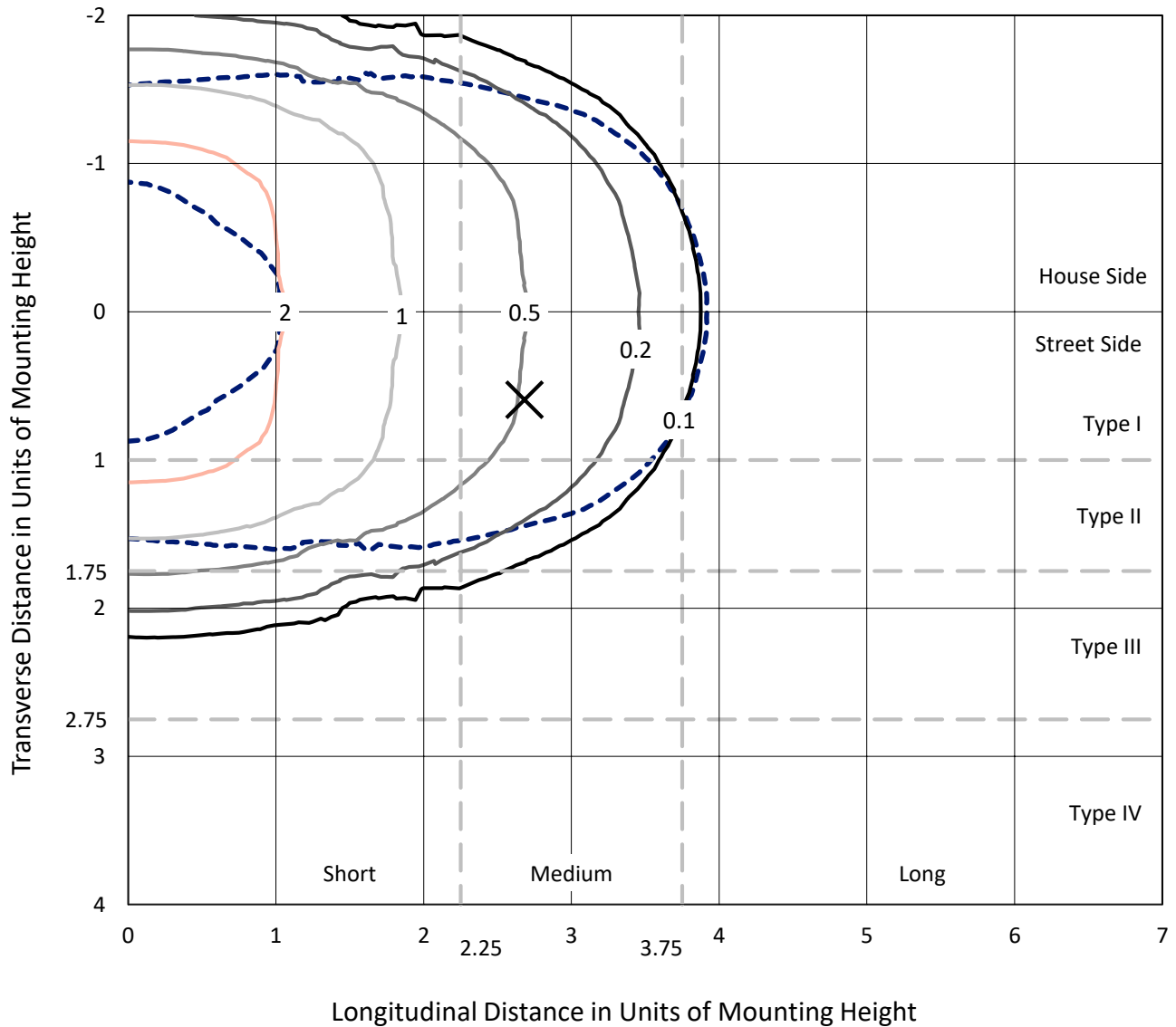


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### Iso-Footcandle Lines of Horizontal Illumination

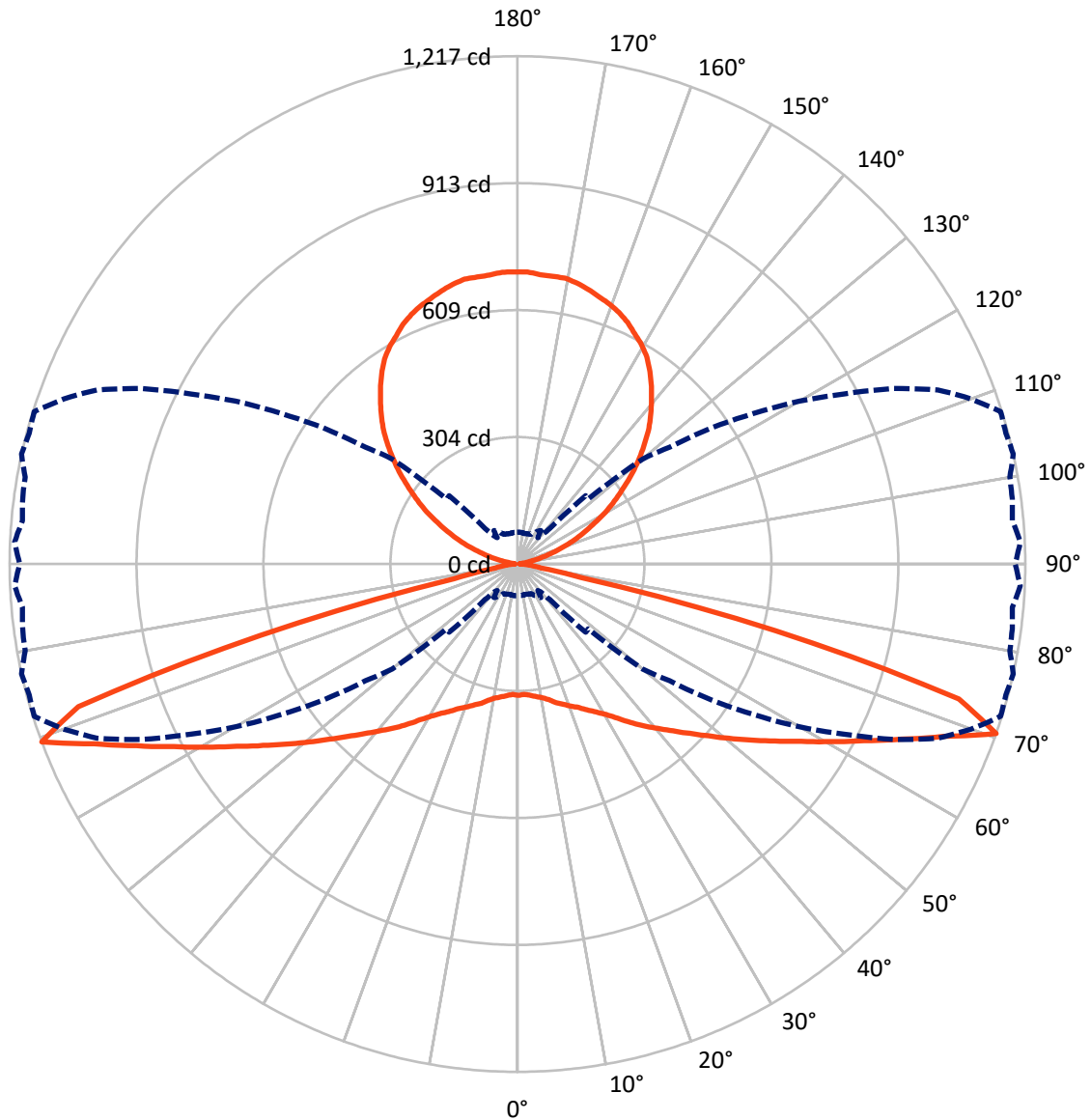
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.2 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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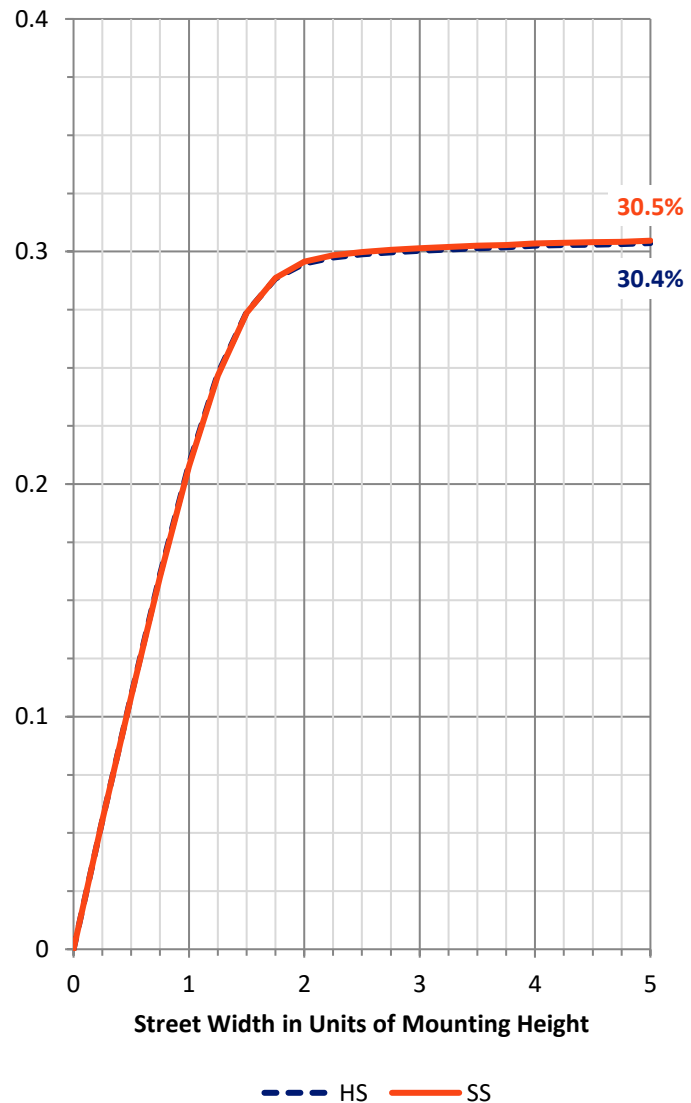
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1370.3	867.8	2238.1
	% Fixture	30.6	19.4	50.0
<b>Street Side</b>	Lumens	1370.3	867.8	2238.1
	% Fixture	30.6	19.4	50.0
<b>Total</b>	Lumens	2740.6	1735.6	4476.1
	% Fixture	61.2	38.8	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.4	0.7
10°-20°	95.1	2.1
20°-30°	178.6	4.0
30°-40°	312.1	7.0
40°-50°	508.7	11.4
50°-60°	696.1	15.6
60°-70°	640.4	14.3
70°-80°	250.3	5.6
80°-90°	28.9	0.6
90°-100°	9.7	0.2
100°-110°	57.4	1.3
110°-120°	166.1	3.7
120°-130°	273.2	6.1
130°-140°	336.8	7.5
140°-150°	344.6	7.7
150°-160°	290.3	6.5
160°-170°	191.2	4.3
170°-180°	66.3	1.5
0°-90°	2740.6	61.2
0°-180°	4476.1	100.0



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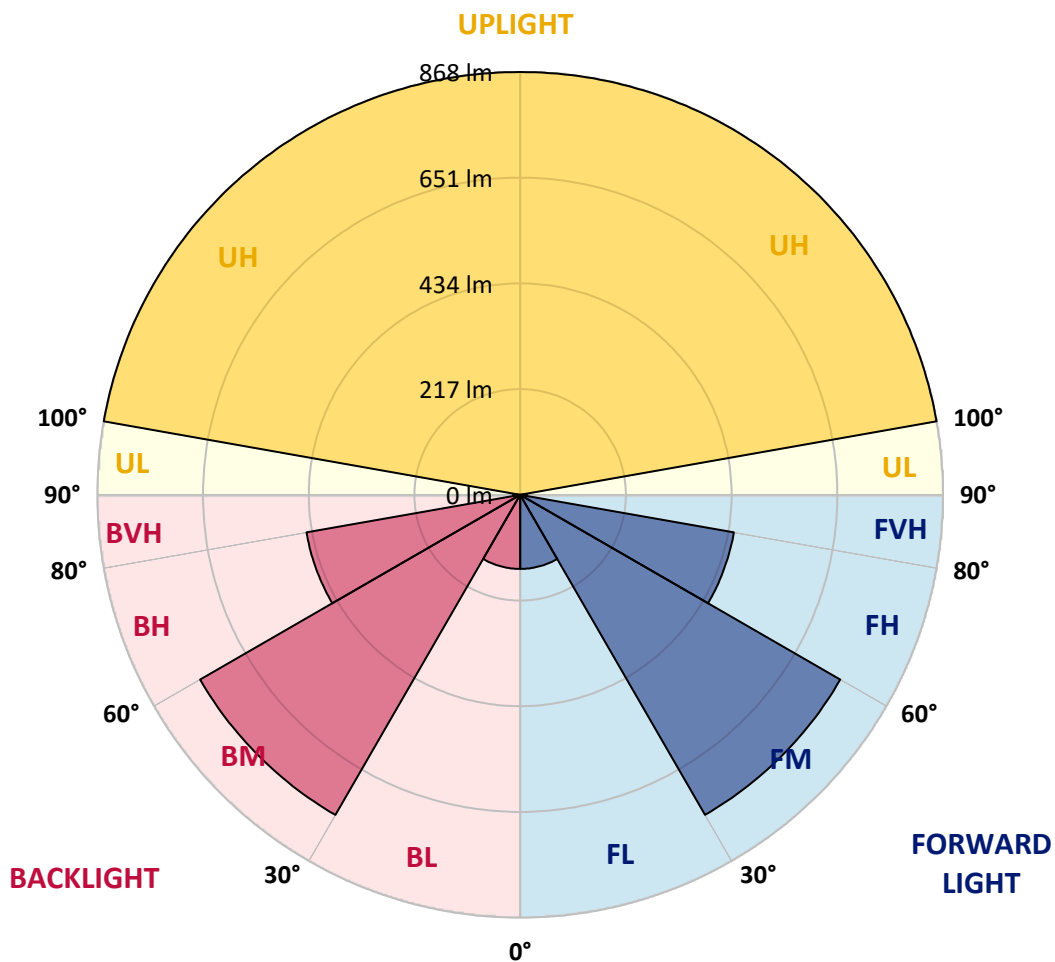
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	152.1	3.4			
FM (30°-60°)	758.4	16.9			
FH (60°-80°)	445.3	9.9			G0/660
FVH (80°-90°)	14.4	0.3			G1/100
BL (0°-30°)	152.1	3.4	B1/500		
BM (30°-60°)	758.4	16.9	B1/1000		
BH (60°-80°)	445.3	9.9	B1/500		G1/500
BVH (80°-90°)	14.4	0.3			G1/100
UL (90°-100°)	9.7	0.2		U1/10	
UH (100°-180°)	867.8	19.4		U4/1000	

**BUG Rating: B1-U5-G1**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8
2.5°	313.5	313.1	313.1	313.5	314.4	314.8	313.9	314.4	314.4	313.9	315.2
5°	314.4	313.9	314.4	315.2	316.4	317.6	317.2	317.2	317.6	316.8	318.8
7.5°	313.5	313.1	313.9	316.0	318.8	320.4	320.4	320.4	321.2	320.8	323.2
10°	309.9	309.5	311.5	315.2	320.4	321.6	322.8	323.2	325.6	325.6	328.1
12.5°	306.7	307.1	309.9	315.6	324.0	324.4	326.0	327.7	330.9	329.3	333.7
15°	307.9	308.7	312.3	319.2	330.5	330.1	331.3	332.9	338.1	334.5	341.8
17.5°	313.9	315.2	319.2	327.2	338.9	336.9	338.5	341.0	347.8	343.4	351.8
20°	323.6	325.2	329.7	338.5	349.4	347.4	349.0	351.8	359.9	355.5	363.9
22.5°	336.5	338.1	343.0	353.0	364.7	362.3	363.9	366.3	375.2	368.4	378.8
25°	353.8	355.5	360.7	371.2	384.5	381.7	382.5	384.1	393.3	385.3	395.4
27.5°	378.0	379.6	384.1	394.1	407.0	404.6	405.4	407.0	416.7	408.7	417.5
30°	408.7	410.3	414.3	424.4	435.3	432.4	433.6	434.9	443.7	435.7	442.9
32.5°	444.9	444.5	450.6	461.0	470.7	465.5	465.5	465.5	473.9	465.9	471.5
35°	487.6	487.6	493.7	503.8	512.6	506.6	503.8	502.2	511.4	501.4	505.4
37.5°	534.4	532.4	541.7	550.9	559.4	551.7	549.3	547.3	554.1	542.9	544.9
40°	584.0	582.4	592.4	602.9	608.6	598.5	596.5	594.0	601.3	590.4	590.0
42.5°	629.1	627.9	640.8	652.9	659.7	646.8	644.0	641.6	649.7	638.8	636.4
45°	667.4	667.0	681.9	698.4	710.5	696.8	694.8	690.8	698.8	685.5	684.3
47.5°	697.2	695.6	713.7	737.9	757.3	743.2	742.8	739.9	748.4	733.9	732.3
50°	717.4	718.6	738.3	766.5	798.0	784.7	785.9	784.7	797.2	782.7	784.7
52.5°	721.0	723.4	748.8	785.9	829.8	813.7	823.0	826.6	842.3	829.8	833.8
55°	677.9	684.7	723.4	787.9	849.6	839.5	851.2	861.6	883.8	873.3	880.6
57.5°	581.5	595.7	640.4	733.9	847.1	852.8	876.6	892.7	919.7	910.4	927.3
60°	449.4	459.0	508.6	617.8	769.8	777.4	820.5	871.7	933.8	946.7	973.3
62.5°	294.2	299.8	348.2	459.0	636.4	638.8	692.4	758.9	866.5	894.7	969.2
65°	145.9	153.5	179.3	264.4	445.7	442.5	501.4	579.1	718.6	749.6	870.9
67.5°	91.1	92.3	97.5	122.5	223.3	198.3	246.6	328.1	496.9	524.7	678.7
70°	76.6	76.2	75.0	78.6	98.3	79.8	88.3	115.3	231.3	230.1	391.3
72.5°	70.5	69.3	66.1	65.7	68.5	62.9	63.7	65.3	92.7	77.8	150.7
75°	64.9	62.5	58.4	57.2	57.2	52.8	52.8	53.2	60.0	56.4	68.5
77.5°	58.0	55.2	51.2	49.6	48.0	43.1	42.7	43.1	48.4	45.1	51.2
80°	50.0	47.2	44.3	41.9	39.5	35.1	33.9	33.9	38.3	35.1	39.9
82.5°	43.5	39.9	39.1	35.1	31.4	27.4	26.2	24.2	28.2	24.6	29.8
85°	32.2	29.4	37.1	31.0	25.0	22.2	17.7	14.9	17.7	14.5	18.9
87.5°	18.5	17.3	32.6	24.6	22.2	23.8	14.5	10.5	10.1	8.9	10.5
90°	8.6	9.0	12.2	11.6	12.8	10.2	8.7	8.4	9.4	8.6	9.8
92.5°	4.0	4.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.2	6.5
95°	5.0	5.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
97.5°	7.0	7.0	8.0	8.0	9.0	9.0	9.0	9.0	9.0	9.8	10.5
100°	8.0	8.0	9.0	10.0	12.0	14.2	16.5	18.8	21.0	23.0	25.0
102.5°	11.0	11.0	13.0	18.0	27.0	30.2	33.5	36.8	40.0	42.5	45.0
105°	21.0	22.0	27.0	36.0	48.0	51.8	55.5	59.2	63.0	65.2	67.5
107.5°	41.0	42.0	49.0	58.0	73.0	76.8	80.5	84.2	88.0	89.8	91.5
110°	66.0	68.0	74.0	87.0	102.0	105.0	108.0	111.0	114.0	115.5	117.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
112.5°	99.0	99.0	106.0	121.0	134.0	136.2	138.5	140.8	143.0	144.2	145.5
115°	140.0	139.0	147.0	159.0	168.0	169.5	171.0	172.5	174.0	175.2	176.5
117.5°	184.0	184.0	189.0	197.0	202.0	202.8	203.5	204.2	205.0	206.5	208.0
120°	225.0	223.0	226.0	233.0	237.0	238.5	240.0	241.5	243.0	243.8	244.5
122.5°	263.0	260.0	261.0	267.0	271.0	272.5	274.0	275.5	277.0	277.5	278.0
125°	298.0	294.0	296.0	299.0	305.0	306.2	307.5	308.8	310.0	310.8	311.5
127.5°	330.0	329.0	329.0	333.0	339.0	339.2	339.5	339.8	340.0	341.2	342.5
130°	363.0	361.0	362.0	366.0	370.0	370.5	371.0	371.5	372.0	373.2	374.5
132.5°	396.0	394.0	393.0	401.0	404.0	404.2	404.5	404.8	405.0	406.5	408.0
135°	429.0	426.0	426.0	432.0	435.0	435.5	436.0	436.5	437.0	438.5	440.0
137.5°	460.0	457.0	459.0	460.0	464.0	465.0	466.0	467.0	468.0	469.2	470.5
140°	488.0	485.0	487.0	489.0	491.0	492.5	494.0	495.5	497.0	497.8	498.5
142.5°	518.0	515.0	517.0	518.0	521.0	522.0	523.0	524.0	525.0	525.5	526.0
145°	550.0	546.0	544.0	547.0	550.0	550.2	550.5	550.8	551.0	552.2	553.5
147.5°	575.0	572.0	571.0	574.0	574.0	574.2	574.5	574.8	575.0	576.2	577.5
150°	595.0	592.0	593.0	593.0	593.0	593.0	593.0	593.0	593.0	594.0	595.0
152.5°	611.0	608.0	608.0	609.0	610.0	610.0	610.0	610.0	610.0	610.2	610.5
155°	629.0	625.0	625.0	627.0	630.0	629.5	629.0	628.5	628.0	627.5	627.0
157.5°	646.0	643.0	643.0	644.0	646.0	645.8	645.5	645.2	645.0	644.8	644.5
160°	663.0	660.0	659.0	656.0	655.0	655.0	655.0	655.0	655.0	655.8	656.5
162.5°	673.0	669.0	669.0	665.0	661.0	661.5	662.0	662.5	663.0	664.0	665.0
165°	681.0	678.0	676.0	676.0	673.0	673.0	673.0	673.0	673.0	672.8	672.5
167.5°	690.0	687.0	684.0	686.0	688.0	687.2	686.5	685.8	685.0	683.2	681.5
170°	698.0	695.0	692.0	692.0	693.0	692.5	692.0	691.5	691.0	689.8	688.5
172.5°	699.0	697.0	695.0	693.0	690.0	690.0	690.0	690.0	690.0	689.8	689.5
175°	700.0	698.0	697.0	695.0	691.0	690.8	690.5	690.2	690.0	690.0	690.0
177.5°	707.0	705.0	700.0	699.0	697.0	696.5	696.0	695.5	695.0	694.8	694.5
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0





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**CANDELA DISTRIBUTION (continued):**

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°
0°	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8	314.8
2.5°	313.9	315.2	313.5	315.2	312.3	314.8	312.7	315.2	313.1	315.2	312.7
5°	316.0	319.2	315.6	320.0	314.8	320.0	315.6	320.4	316.4	320.4	316.0
7.5°	319.2	324.8	320.0	325.6	319.2	326.4	320.4	327.2	321.2	327.7	320.8
10°	323.2	330.5	324.0	331.3	323.6	332.1	324.4	333.3	325.2	334.1	325.6
12.5°	326.8	336.1	328.9	338.5	330.1	340.1	331.3	342.6	332.9	344.6	333.7
15°	333.7	345.8	336.5	348.2	338.5	350.2	340.5	353.4	342.6	355.9	344.6
17.5°	342.6	355.9	346.2	357.9	347.4	360.3	349.8	362.7	351.8	365.5	353.0
20°	354.7	368.0	357.9	369.2	359.1	370.8	360.3	372.0	362.7	374.4	363.5
22.5°	368.4	380.8	370.0	381.3	370.0	380.8	370.8	381.3	372.0	382.9	373.2
25°	384.9	396.6	385.7	395.4	384.1	393.7	384.1	393.7	385.3	394.6	387.3
27.5°	407.9	416.7	405.4	413.9	401.8	410.3	400.2	408.7	400.6	408.7	401.4
30°	433.6	441.7	428.8	435.7	422.4	428.8	417.9	425.2	416.7	424.4	418.7
32.5°	461.9	468.3	455.4	461.0	447.3	453.0	441.3	446.1	438.9	443.7	440.1
35°	493.3	499.7	486.4	491.7	478.0	482.8	471.1	473.5	466.3	469.5	466.3
37.5°	530.8	536.4	521.1	525.9	511.0	517.1	503.0	505.4	496.5	498.5	492.1
40°	571.1	577.1	559.0	563.8	545.3	552.1	536.4	538.0	525.9	527.9	517.9
42.5°	614.6	620.2	597.7	601.7	579.9	587.2	568.7	571.9	557.4	559.4	546.5
45°	662.6	665.8	640.8	643.6	617.4	624.7	601.3	607.3	590.0	594.0	579.1
47.5°	707.3	713.7	686.3	688.8	660.5	665.0	638.0	646.0	627.5	633.5	615.4
50°	758.5	763.3	737.1	737.5	710.1	711.7	681.5	689.6	669.4	675.9	656.5
52.5°	810.9	814.1	785.9	788.7	761.7	764.5	734.3	737.5	714.1	719.8	700.8
55°	861.6	862.5	839.1	838.3	812.9	818.1	784.7	791.9	764.1	770.2	748.8
57.5°	912.4	915.2	893.5	894.3	868.9	872.5	842.3	847.5	821.3	828.6	802.0
60°	966.0	974.9	953.5	956.4	932.2	939.4	902.8	909.6	881.0	892.7	864.1
62.5°	1000.3	1033.3	1029.3	1033.7	1010.8	1014.4	976.5	987.4	953.1	961.6	932.2
65°	935.0	1016.0	1057.1	1102.2	1103.5	1115.1	1078.5	1082.5	1048.2	1046.2	1011.6
67.5°	762.1	862.0	931.4	1024.1	1088.9	1151.4	1174.0	1179.6	1161.1	1141.3	1102.2
70°	459.8	569.1	671.0	780.2	882.6	995.0	1090.6	1156.7	1214.3	1211.5	1217.1
72.5°	181.8	272.4	340.5	442.9	544.5	669.0	774.6	867.7	966.8	1027.7	1106.7
75°	71.7	94.7	110.8	168.1	216.4	309.1	402.2	452.6	530.4	583.6	638.4
77.5°	51.6	56.4	57.2	66.5	70.1	97.1	113.7	131.0	147.5	158.0	156.0
80°	39.9	43.1	43.1	47.2	46.7	52.0	50.8	55.6	55.2	59.2	56.4
82.5°	29.8	31.8	31.8	35.1	35.1	38.3	37.5	40.7	39.5	42.3	39.5
85°	19.3	21.4	21.4	23.0	22.2	25.4	25.0	27.4	26.2	27.4	25.4
87.5°	10.9	12.1	12.5	13.7	12.5	14.9	14.5	15.7	14.5	15.7	14.9
90°	8.6	9.4	9.1	10.4	9.7	12.6	11.0	13.0	10.2	13.8	10.5
92.5°	6.8	7.0	7.0	7.0	7.0	7.0	6.8	6.5	6.2	6.0	6.0
95°	7.0	7.0	7.2	7.5	7.8	8.0	7.8	7.5	7.2	7.0	7.0
97.5°	11.2	12.0	11.5	11.0	10.5	10.0	9.8	9.5	9.2	9.0	8.8
100°	27.0	29.0	28.2	27.5	26.8	26.0	25.2	24.5	23.8	23.0	22.0
102.5°	47.5	50.0	49.2	48.5	47.8	47.0	45.8	44.5	43.2	42.0	41.2
105°	69.8	72.0	71.5	71.0	70.5	70.0	68.8	67.5	66.2	65.0	64.0
107.5°	93.2	95.0	94.8	94.5	94.2	94.0	93.0	92.0	91.0	90.0	89.2
110°	118.5	120.0	120.2	120.5	120.8	121.0	120.5	120.0	119.5	119.0	118.2



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CATALOG NUMBER: IST-AF-450-LED-E1-RW-7030-ULG

**CANDELA DISTRIBUTION (continued):**

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°
112.5°	146.8	148.0	148.5	149.0	149.5	150.0	149.8	149.5	149.2	149.0	148.5
115°	177.8	179.0	179.8	180.5	181.2	182.0	181.2	180.5	179.8	179.0	178.5
117.5°	209.5	211.0	212.0	213.0	214.0	215.0	213.8	212.5	211.2	210.0	209.5
120°	245.2	246.0	247.0	248.0	249.0	250.0	248.8	247.5	246.2	245.0	244.5
122.5°	278.5	279.0	280.0	281.0	282.0	283.0	281.8	280.5	279.2	278.0	277.5
125°	312.2	313.0	313.5	314.0	314.5	315.0	313.8	312.5	311.2	310.0	310.0
127.5°	343.8	345.0	345.2	345.5	345.8	346.0	346.0	346.0	346.0	346.0	345.8
130°	375.8	377.0	378.0	379.0	380.0	381.0	381.0	381.0	381.0	381.0	380.5
132.5°	409.5	411.0	412.2	413.5	414.8	416.0	415.5	415.0	414.5	414.0	414.0
135°	441.5	443.0	444.2	445.5	446.8	448.0	447.8	447.5	447.2	447.0	447.8
137.5°	471.8	473.0	473.5	474.0	474.5	475.0	475.2	475.5	475.8	476.0	477.2
140°	499.2	500.0	500.5	501.0	501.5	502.0	502.5	503.0	503.5	504.0	505.2
142.5°	526.5	527.0	528.5	530.0	531.5	533.0	533.0	533.0	533.0	533.0	533.2
145°	554.8	556.0	557.5	559.0	560.5	562.0	561.8	561.5	561.2	561.0	560.2
147.5°	578.8	580.0	581.2	582.5	583.8	585.0	585.2	585.5	585.8	586.0	585.2
150°	596.0	597.0	597.8	598.5	599.2	600.0	600.8	601.5	602.2	603.0	603.8
152.5°	610.8	611.0	611.8	612.5	613.2	614.0	615.0	616.0	617.0	618.0	619.2
155°	626.5	626.0	627.2	628.5	629.8	631.0	632.2	633.5	634.8	636.0	636.5
157.5°	644.2	644.0	645.0	646.0	647.0	648.0	648.5	649.0	649.5	650.0	650.0
160°	657.2	658.0	659.5	661.0	662.5	664.0	663.2	662.5	661.8	661.0	660.8
162.5°	666.0	667.0	668.0	669.0	670.0	671.0	670.8	670.5	670.2	670.0	669.5
165°	672.2	672.0	673.2	674.5	675.8	677.0	677.8	678.5	679.2	680.0	679.5
167.5°	679.8	678.0	679.5	681.0	682.5	684.0	685.0	686.0	687.0	688.0	688.0
170°	687.2	686.0	686.8	687.5	688.2	689.0	690.2	691.5	692.8	694.0	694.5
172.5°	689.2	689.0	689.8	690.5	691.2	692.0	692.5	693.0	693.5	694.0	694.5
175°	690.0	690.0	691.2	692.5	693.8	695.0	695.2	695.5	695.8	696.0	695.5
177.5°	694.2	694.0	695.2	696.5	697.8	699.0	699.5	700.0	700.5	701.0	700.2
180°	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0	700.0



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**CANDELA DISTRIBUTION (continued):**

	80°	82.5°	85°	87.5°	90°
0°	314.8	314.8	314.8	314.8	314.8
2.5°	314.8	313.9	315.6	313.1	315.2
5°	320.4	316.8	321.2	316.8	320.8
7.5°	328.1	322.0	328.5	322.0	328.5
10°	335.3	325.2	335.7	326.0	336.1
12.5°	346.2	334.1	347.8	334.5	347.8
15°	358.3	344.6	359.9	345.0	360.7
17.5°	368.0	354.7	369.6	354.7	370.0
20°	376.0	365.5	378.0	365.5	379.2
22.5°	385.3	377.6	387.7	377.6	390.1
25°	397.4	392.1	400.2	392.9	401.8
27.5°	411.5	407.9	414.3	409.1	415.9
30°	428.0	426.8	430.0	427.6	431.6
32.5°	446.5	449.4	449.4	449.4	451.0
35°	473.5	476.0	476.0	476.8	477.2
37.5°	499.3	503.4	503.0	504.2	504.2
40°	526.3	531.6	531.6	531.6	532.4
42.5°	556.2	561.8	562.6	560.2	561.8
45°	589.6	591.6	593.6	592.4	595.3
47.5°	625.5	627.5	629.1	627.5	631.9
50°	667.8	667.4	671.8	667.4	673.8
52.5°	712.1	715.8	718.6	714.1	718.6
55°	762.1	760.9	770.2	764.1	770.2
57.5°	816.9	816.9	826.2	820.5	827.4
60°	881.8	876.6	889.5	880.2	889.5
62.5°	947.5	938.2	952.7	944.7	956.8
65°	1023.3	1010.0	1023.7	1013.2	1024.1
67.5°	1099.8	1084.5	1088.9	1083.7	1089.8
70°	1198.2	1196.1	1190.9	1206.2	1192.9
72.5°	1094.2	1117.6	1098.6	1135.3	1110.3
75°	672.2	715.4	739.1	776.6	770.6
77.5°	159.2	141.5	156.0	139.8	157.6
80°	58.8	53.6	56.0	48.8	54.4
82.5°	40.3	35.1	33.9	27.0	29.0
85°	25.8	21.0	19.3	16.1	17.7
87.5°	15.3	11.7	10.9	9.3	9.7
90°	12.4	9.1	10.2	7.8	9.8
92.5°	6.0	6.0	6.0	6.0	6.0
95°	7.0	7.0	7.0	7.0	7.0
97.5°	8.5	8.2	8.0	8.0	8.0
100°	21.0	20.0	19.0	19.0	19.0
102.5°	40.5	39.8	39.0	38.5	38.0
105°	63.0	62.0	61.0	61.0	61.0
107.5°	88.5	87.8	87.0	86.5	86.0
110°	117.5	116.8	116.0	116.5	117.0



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CATALOG NUMBER: IST-AF-450-LED-E1-RW-7030-ULG

**CANDELA DISTRIBUTION (continued):**

	80°	82.5°	85°	87.5°	90°
112.5°	148.0	147.5	147.0	147.0	147.0
115°	178.0	177.5	177.0	177.5	178.0
117.5°	209.0	208.5	208.0	208.5	209.0
120°	244.0	243.5	243.0	243.0	243.0
122.5°	277.0	276.5	276.0	276.5	277.0
125°	310.0	310.0	310.0	310.0	310.0
127.5°	345.5	345.2	345.0	346.0	347.0
130°	380.0	379.5	379.0	379.5	380.0
132.5°	414.0	414.0	414.0	414.5	415.0
135°	448.5	449.2	450.0	450.5	451.0
137.5°	478.5	479.8	481.0	481.5	482.0
140°	506.5	507.8	509.0	510.0	511.0
142.5°	533.5	533.8	534.0	535.0	536.0
145°	559.5	558.8	558.0	559.0	560.0
147.5°	584.5	583.8	583.0	584.0	585.0
150°	604.5	605.2	606.0	608.0	610.0
152.5°	620.5	621.8	623.0	625.5	628.0
155°	637.0	637.5	638.0	639.5	641.0
157.5°	650.0	650.0	650.0	652.5	655.0
160°	660.5	660.2	660.0	663.0	666.0
162.5°	669.0	668.5	668.0	671.0	674.0
165°	679.0	678.5	678.0	680.0	682.0
167.5°	688.0	688.0	688.0	691.0	694.0
170°	695.0	695.5	696.0	698.5	701.0
172.5°	695.0	695.5	696.0	698.5	701.0
175°	695.0	694.5	694.0	696.5	699.0
177.5°	699.5	698.8	698.0	700.0	702.0
180°	700.0	700.0	700.0	700.0	700.0

(END OF REPORT)