

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: P227476

Luminaire Tested: **IST-AF-450-LED-E1-RW-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227476
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-8030-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, 80 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4261.9 lumens
Efficiency: N/A
Efficacy: 101.5 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

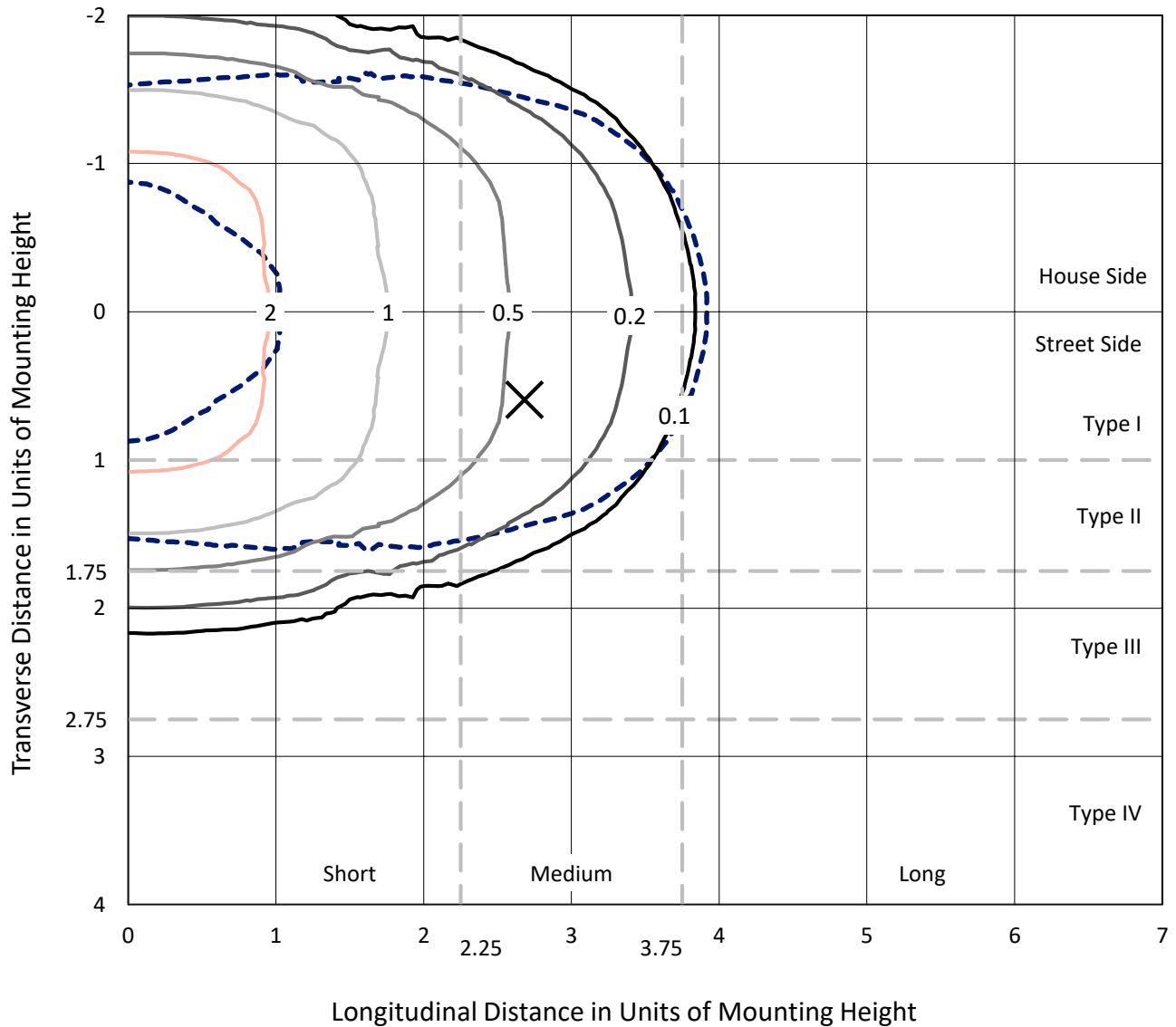


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Iso-Footcandle Lines of Horizontal Illumination

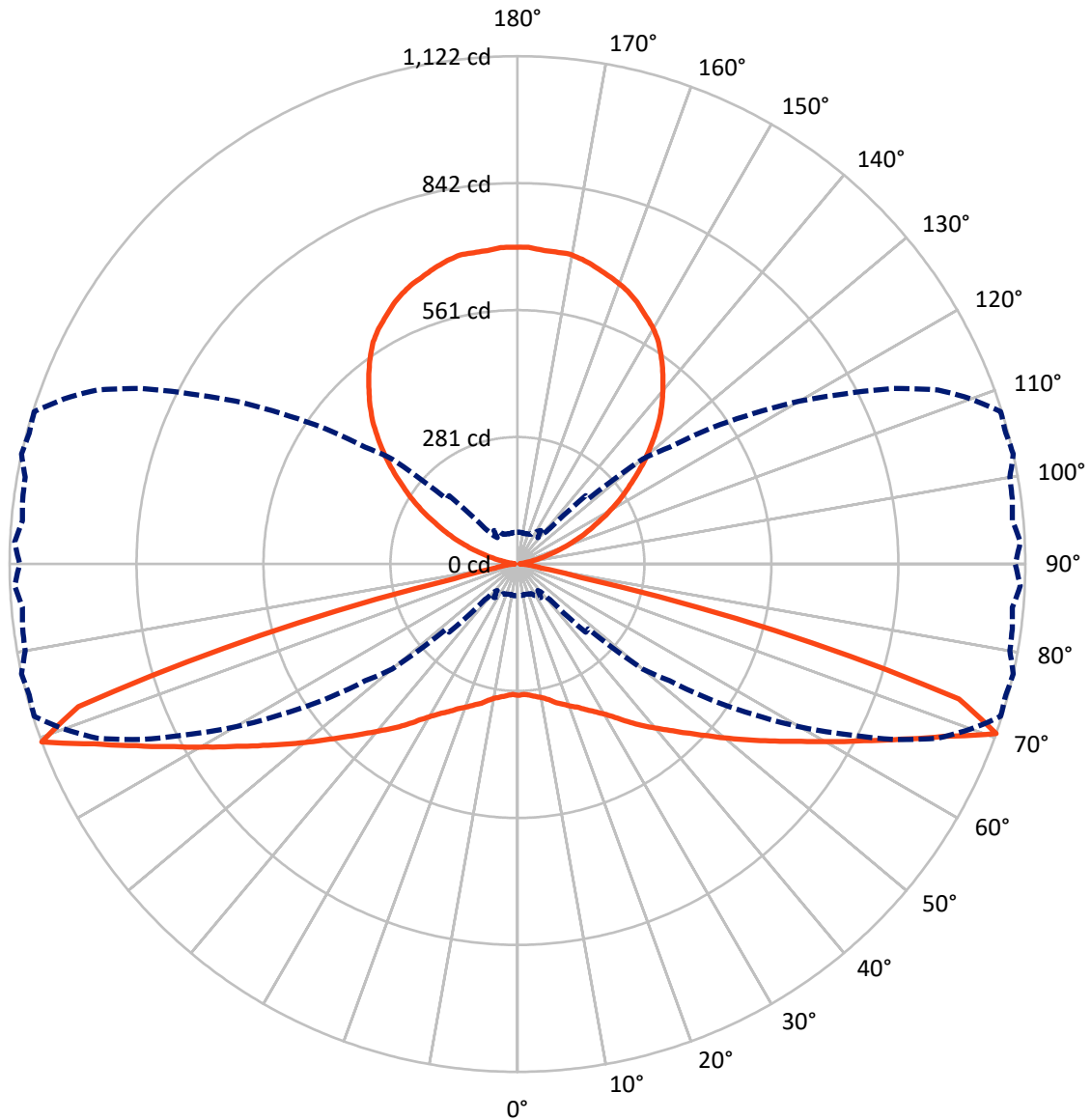
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3 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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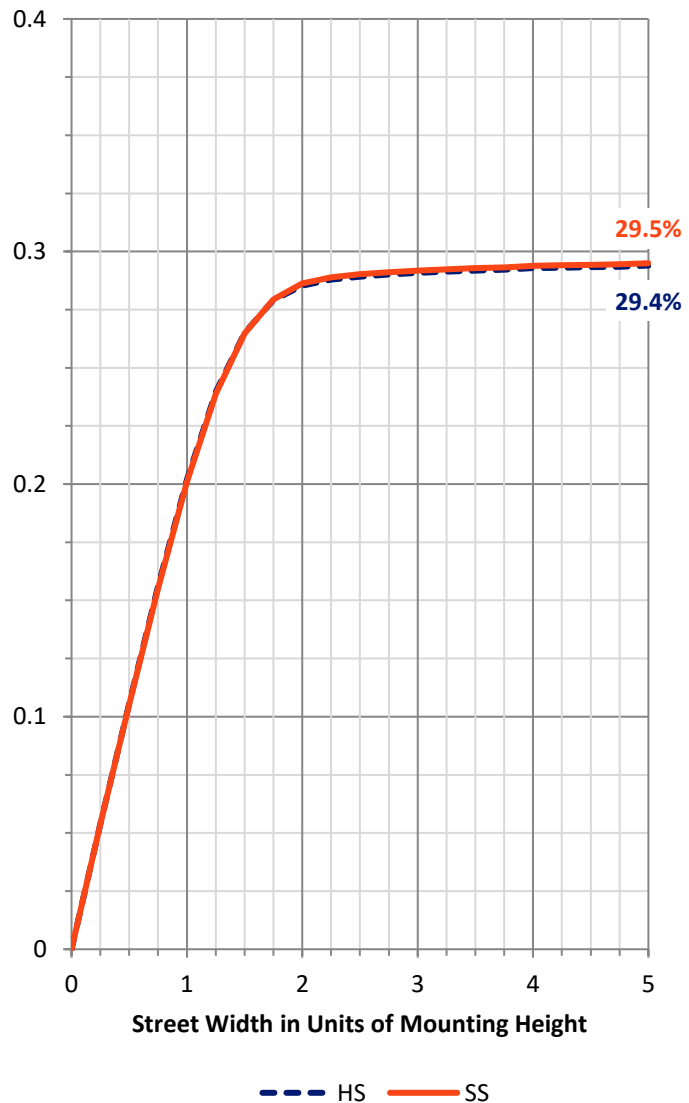
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1263.2	867.8	2131.0
	% Fixture	29.6	20.4	50.0
Street Side	Lumens	1263.2	867.8	2131.0
	% Fixture	29.6	20.4	50.0
Total	Lumens	2526.4	1735.5	4261.9
	% Fixture	59.3	40.7	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.0	0.7
10°-20°	87.7	2.1
20°-30°	164.6	3.9
30°-40°	287.7	6.7
40°-50°	468.9	11.0
50°-60°	641.7	15.1
60°-70°	590.3	13.9
70°-80°	230.8	5.4
80°-90°	26.7	0.6
90°-100°	9.7	0.2
100°-110°	57.4	1.3
110°-120°	166.1	3.9
120°-130°	273.2	6.4
130°-140°	336.8	7.9
140°-150°	344.6	8.1
150°-160°	290.3	6.8
160°-170°	191.2	4.5
170°-180°	66.3	1.6
0°-90°	2526.4	59.3
0°-180°	4261.9	100.0



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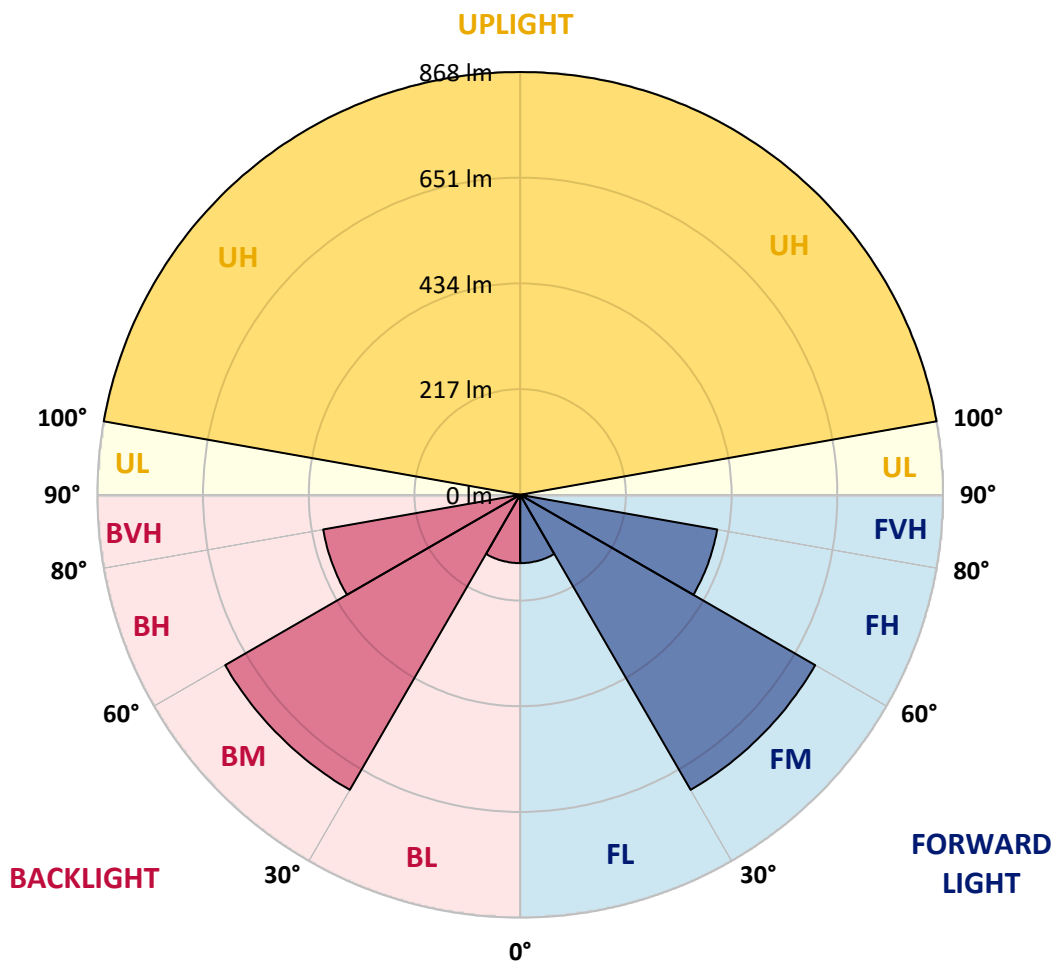
CATALOG NUMBER: IST-AF-450-LED-E1-RW-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	140.2	3.3			
FM (30°-60°)	699.2	16.4			
FH (60°-80°)	410.5	9.6			G0/660
FVH (80°-90°)	13.3	0.3			G1/100
BL (0°-30°)	140.2	3.3	B1/500		
BM (30°-60°)	699.2	16.4	B1/1000		
BH (60°-80°)	410.5	9.6	B1/500		G1/500
BVH (80°-90°)	13.3	0.3			G1/100
UL (90°-100°)	9.7	0.2		U1/10	
UH (100°-180°)	867.8	20.4		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°	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1
2.5°	289.0	288.7	288.7	289.0	289.8	290.1	289.4	289.8	289.8	289.4	290.5
5°	289.8	289.4	289.8	290.5	291.6	292.7	292.4	292.4	292.7	292.0	293.9
7.5°	289.0	288.7	289.4	291.3	293.9	295.3	295.3	295.3	296.1	295.7	298.0
10°	285.7	285.3	287.2	290.5	295.3	296.5	297.6	298.0	300.2	300.2	302.4
12.5°	282.7	283.1	285.7	290.9	298.7	299.1	300.6	302.0	305.0	303.5	307.6
15°	283.8	284.6	287.9	294.2	304.6	304.3	305.4	306.9	311.7	308.4	315.0
17.5°	289.4	290.5	294.2	301.7	312.4	310.6	312.1	314.3	320.6	316.5	324.3
20°	298.3	299.8	303.9	312.1	322.1	320.2	321.7	324.3	331.8	327.7	335.5
22.5°	310.2	311.7	316.2	325.4	336.2	334.0	335.5	337.7	345.9	339.6	349.2
25°	326.2	327.7	332.5	342.2	354.4	351.8	352.6	354.0	362.6	355.2	364.5
27.5°	348.5	350.0	354.0	363.3	375.2	373.0	373.7	375.2	384.1	376.7	384.9
30°	376.7	378.2	381.9	391.2	401.2	398.6	399.7	400.9	409.0	401.6	408.3
32.5°	410.1	409.8	415.3	425.0	433.9	429.1	429.1	429.1	436.9	429.5	434.7
35°	449.5	449.5	455.1	464.4	472.6	467.0	464.4	462.9	471.4	462.2	465.9
37.5°	492.6	490.8	499.3	507.9	515.7	508.6	506.4	504.5	510.8	500.4	502.3
40°	538.3	536.8	546.1	555.8	561.0	551.7	549.8	547.6	554.3	544.3	543.9
42.5°	579.9	578.8	590.7	601.8	608.2	596.3	593.7	591.4	598.9	588.8	586.6
45°	615.2	614.8	628.6	643.8	655.0	642.3	640.5	636.8	644.2	631.9	630.8
47.5°	642.7	641.2	657.9	680.2	698.1	685.1	684.7	682.1	689.9	676.5	675.0
50°	661.3	662.4	680.6	706.6	735.6	723.3	724.4	723.3	734.8	721.5	723.3
52.5°	664.6	666.9	690.3	724.4	764.9	750.1	758.6	762.0	776.5	764.9	768.7
55°	624.9	631.2	666.9	726.3	783.1	773.9	784.6	794.3	814.7	805.1	811.7
57.5°	536.1	549.1	590.3	676.5	780.9	786.1	808.0	822.9	847.8	839.2	854.8
60°	414.2	423.1	468.8	569.5	709.6	716.6	756.4	803.6	860.8	872.7	897.2
62.5°	271.2	276.4	321.0	423.1	586.6	588.8	638.3	699.6	798.7	824.8	893.5
65°	134.5	141.5	165.3	243.7	410.9	407.9	462.2	533.9	662.4	691.0	802.8
67.5°	84.0	85.1	89.9	112.9	205.8	182.8	227.4	302.4	458.1	483.7	625.6
70°	70.6	70.2	69.1	72.4	90.6	73.6	81.4	106.3	213.2	212.1	360.7
72.5°	65.0	63.9	60.9	60.6	63.2	58.0	58.7	60.2	85.4	71.7	138.9
75°	59.8	57.6	53.9	52.8	52.8	48.7	48.7	49.0	55.4	52.0	63.2
77.5°	53.5	50.9	47.2	45.7	44.2	39.8	39.4	39.8	44.6	41.6	47.2
80°	46.1	43.5	40.9	38.6	36.4	32.3	31.2	31.2	35.3	32.3	36.8
82.5°	40.1	36.8	36.0	32.3	29.0	25.3	24.1	22.3	26.0	22.7	27.5
85°	29.7	27.1	34.2	28.6	23.0	20.4	16.3	13.7	16.3	13.4	17.5
87.5°	17.1	16.0	30.1	22.7	20.4	21.9	13.4	9.7	9.3	8.2	9.7
90°	8.3	8.7	11.8	11.3	12.5	10.0	8.6	8.4	9.2	8.5	9.6
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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CATALOG NUMBER: IST-AF-450-LED-E1-RW-8030-ULG

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°	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1	290.1
2.5°	289.4	290.5	289.0	290.5	287.9	290.1	288.3	290.5	288.7	290.5	288.3
5°	291.3	294.2	290.9	295.0	290.1	295.0	290.9	295.3	291.6	295.3	291.3
7.5°	294.2	299.4	295.0	300.2	294.2	300.9	295.3	301.7	296.1	302.0	295.7
10°	298.0	304.6	298.7	305.4	298.3	306.1	299.1	307.2	299.8	308.0	300.2
12.5°	301.3	309.8	303.2	312.1	304.3	313.6	305.4	315.8	306.9	317.6	307.6
15°	307.6	318.8	310.2	321.0	312.1	322.8	313.9	325.8	315.8	328.0	317.6
17.5°	315.8	328.0	319.1	329.9	320.2	332.1	322.5	334.4	324.3	337.0	325.4
20°	326.9	339.2	329.9	340.3	331.0	341.8	332.1	342.9	334.4	345.1	335.1
22.5°	339.6	351.1	341.0	351.4	341.0	351.1	341.8	351.4	342.9	352.9	344.0
25°	354.8	365.6	355.5	364.5	354.0	363.0	354.0	363.0	355.2	363.7	357.0
27.5°	376.0	384.1	373.7	381.5	370.4	378.2	368.9	376.7	369.3	376.7	370.0
30°	399.7	407.2	395.3	401.6	389.3	395.3	385.3	391.9	384.1	391.2	386.0
32.5°	425.7	431.7	419.8	425.0	412.4	417.6	406.8	411.3	404.6	409.0	405.7
35°	454.7	460.7	448.4	453.2	440.6	445.1	434.3	436.5	429.8	432.8	429.8
37.5°	489.3	494.5	480.4	484.8	471.1	476.6	463.6	465.9	457.7	459.6	453.6
40°	526.4	532.0	515.3	519.7	502.7	509.0	494.5	496.0	484.8	486.7	477.4
42.5°	566.6	571.8	550.9	554.7	534.6	541.3	524.2	527.2	513.8	515.7	503.8
45°	610.8	613.7	590.7	593.3	569.2	575.8	554.3	559.9	543.9	547.6	533.9
47.5°	652.0	657.9	632.7	634.9	608.9	613.0	588.1	595.5	578.4	584.0	567.3
50°	699.2	703.6	679.5	679.9	654.6	656.1	628.2	635.7	617.1	623.0	605.2
52.5°	747.5	750.4	724.4	727.0	702.2	704.8	676.9	679.9	658.3	663.5	646.1
55°	794.3	795.0	773.5	772.7	749.3	754.2	723.3	730.0	704.4	710.0	690.3
57.5°	841.1	843.7	823.6	824.4	801.0	804.3	776.5	781.3	757.1	763.8	739.3
60°	890.5	898.7	879.0	881.6	859.3	866.0	832.2	838.5	812.1	822.9	796.5
62.5°	922.1	952.5	948.8	952.9	931.7	935.1	900.2	910.2	878.6	886.4	859.3
65°	861.9	936.6	974.5	1016.1	1017.2	1028.0	994.2	997.9	966.3	964.4	932.5
67.5°	702.5	794.7	858.6	944.0	1003.8	1061.4	1082.2	1087.4	1070.3	1052.1	1016.1
70°	423.9	524.6	618.6	719.2	813.6	917.3	1005.3	1066.2	1119.4	1116.8	1122.0
72.5°	167.6	251.1	313.9	408.3	501.9	616.7	714.0	799.9	891.3	947.3	1020.2
75°	66.1	87.3	102.2	154.9	199.5	284.9	370.8	417.2	488.9	537.9	588.5
77.5°	47.6	52.0	52.8	61.3	64.6	89.5	104.8	120.7	136.0	145.6	143.8
80°	36.8	39.8	39.8	43.5	43.1	47.9	46.8	51.3	50.9	54.6	52.0
82.5°	27.5	29.3	29.3	32.3	32.3	35.3	34.6	37.5	36.4	39.0	36.4
85°	17.8	19.7	19.7	21.2	20.4	23.4	23.0	25.3	24.1	25.3	23.4
87.5°	10.0	11.1	11.5	12.6	11.5	13.7	13.4	14.5	13.4	14.5	13.7
90°	8.5	9.2	9.0	10.2	9.6	12.3	10.9	12.7	10.1	13.5	10.4
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-8030-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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CATALOG NUMBER: IST-AF-450-LED-E1-RW-8030-ULG

CANDELA DISTRIBUTION (continued):

	80°	82.5°	85°	87.5°	90°
0°	290.1	290.1	290.1	290.1	290.1
2.5°	290.1	289.4	290.9	288.7	290.5
5°	295.3	292.0	296.1	292.0	295.7
7.5°	302.4	296.8	302.8	296.8	302.8
10°	309.1	299.8	309.5	300.6	309.8
12.5°	319.1	308.0	320.6	308.4	320.6
15°	330.3	317.6	331.8	318.0	332.5
17.5°	339.2	326.9	340.7	326.9	341.0
20°	346.6	337.0	348.5	337.0	349.6
22.5°	355.2	348.1	357.4	348.1	359.6
25°	366.3	361.5	368.9	362.2	370.4
27.5°	379.3	376.0	381.9	377.1	383.4
30°	394.5	393.4	396.4	394.2	397.9
32.5°	411.6	414.2	414.2	414.2	415.7
35°	436.5	438.8	438.8	439.5	439.9
37.5°	460.3	464.0	463.6	464.8	464.8
40°	485.2	490.0	490.0	490.0	490.8
42.5°	512.7	517.9	518.6	516.4	517.9
45°	543.5	545.4	547.2	546.1	548.7
47.5°	576.6	578.4	579.9	578.4	582.5
50°	615.6	615.2	619.3	615.2	621.2
52.5°	656.5	659.8	662.4	658.3	662.4
55°	702.5	701.4	710.0	704.4	710.0
57.5°	753.0	753.0	761.6	756.4	762.7
60°	812.9	808.0	819.9	811.4	819.9
62.5°	873.4	864.9	878.2	870.8	882.0
65°	943.3	931.0	943.6	934.0	944.0
67.5°	1013.8	999.7	1003.8	999.0	1004.6
70°	1104.5	1102.6	1097.8	1111.9	1099.7
72.5°	1008.6	1030.2	1012.7	1046.5	1023.5
75°	619.7	659.4	681.3	715.9	710.3
77.5°	146.7	130.4	143.8	128.9	145.3
80°	54.2	49.4	51.6	45.0	50.2
82.5°	37.2	32.3	31.2	24.9	26.7
85°	23.8	19.3	17.8	14.9	16.3
87.5°	14.1	10.8	10.0	8.5	8.9
90°	12.1	9.0	10.0	7.7	9.6
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



REPORT NUMBER: P227476

CATALOG NUMBER: IST-AF-450-LED-E1-RW-8030-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)