

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: P271730

Luminaire Tested: **IST-AF-800-LED-E1-T4W-7027-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271730
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-800-LED-E1-T4W-7027-ULG
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, WITH UPLIGHT GLOW
Light Source: (16) 2700K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6160.2 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U5 - G1

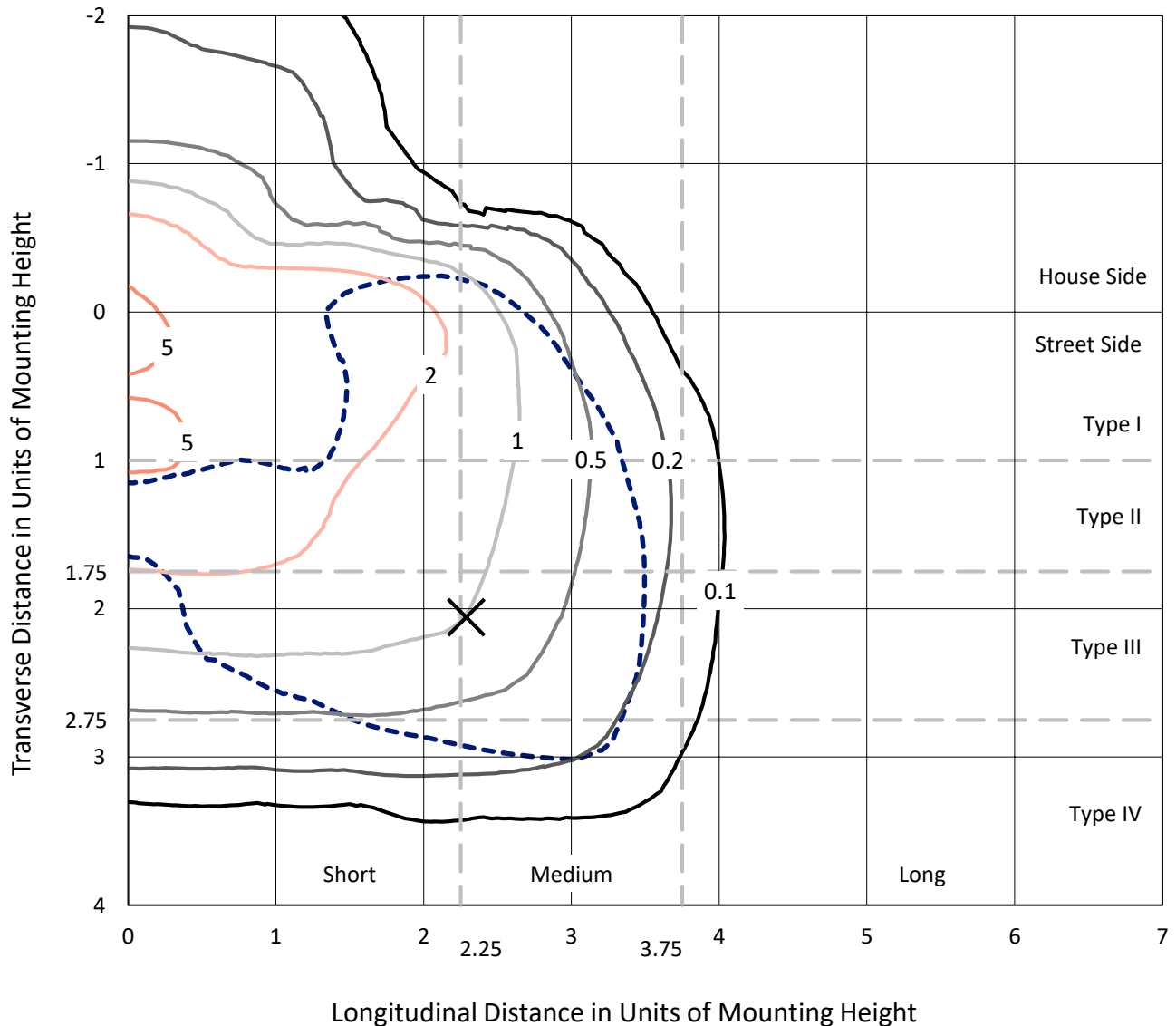
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

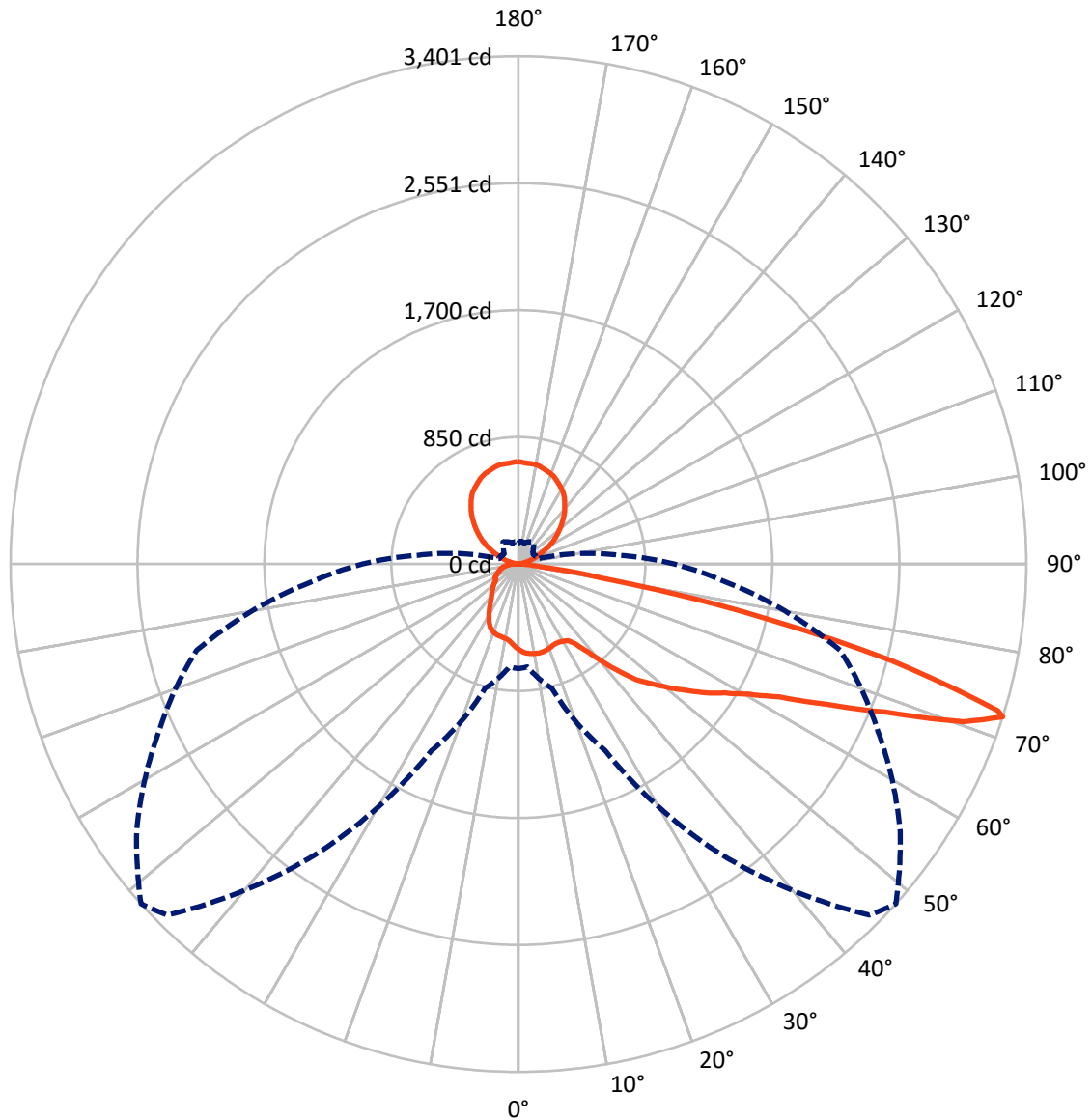
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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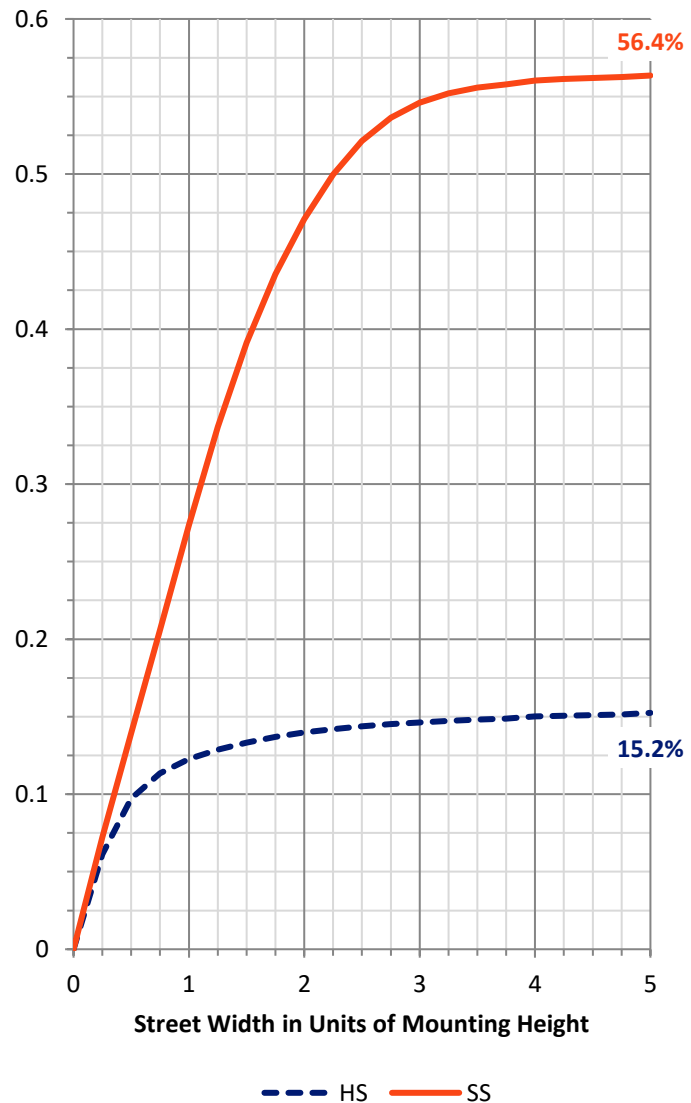
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	968.4	853.5	1821.9
	% Fixture	15.7	13.9	29.6
Street Side	Lumens	3486.2	852.2	4338.4
	% Fixture	56.6	13.8	70.4
Total	Lumens	4454.5	1705.7	6160.2
	% Fixture	72.3	27.7	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	0.9
10°-20°	158.3	2.6
20°-30°	244.2	4.0
30°-40°	366.0	5.9
40°-50°	609.4	9.9
50°-60°	952.4	15.5
60°-70°	1258.0	20.4
70°-80°	727.7	11.8
80°-90°	84.4	1.4
90°-100°	11.8	0.2
100°-110°	56.3	0.9
110°-120°	163.1	2.6
120°-130°	268.1	4.4
130°-140°	330.6	5.4
140°-150°	338.2	5.5
150°-160°	284.9	4.6
160°-170°	187.6	3.0
170°-180°	65.0	1.1
0°-90°	4454.5	72.3
0°-180°	6160.2	100.0



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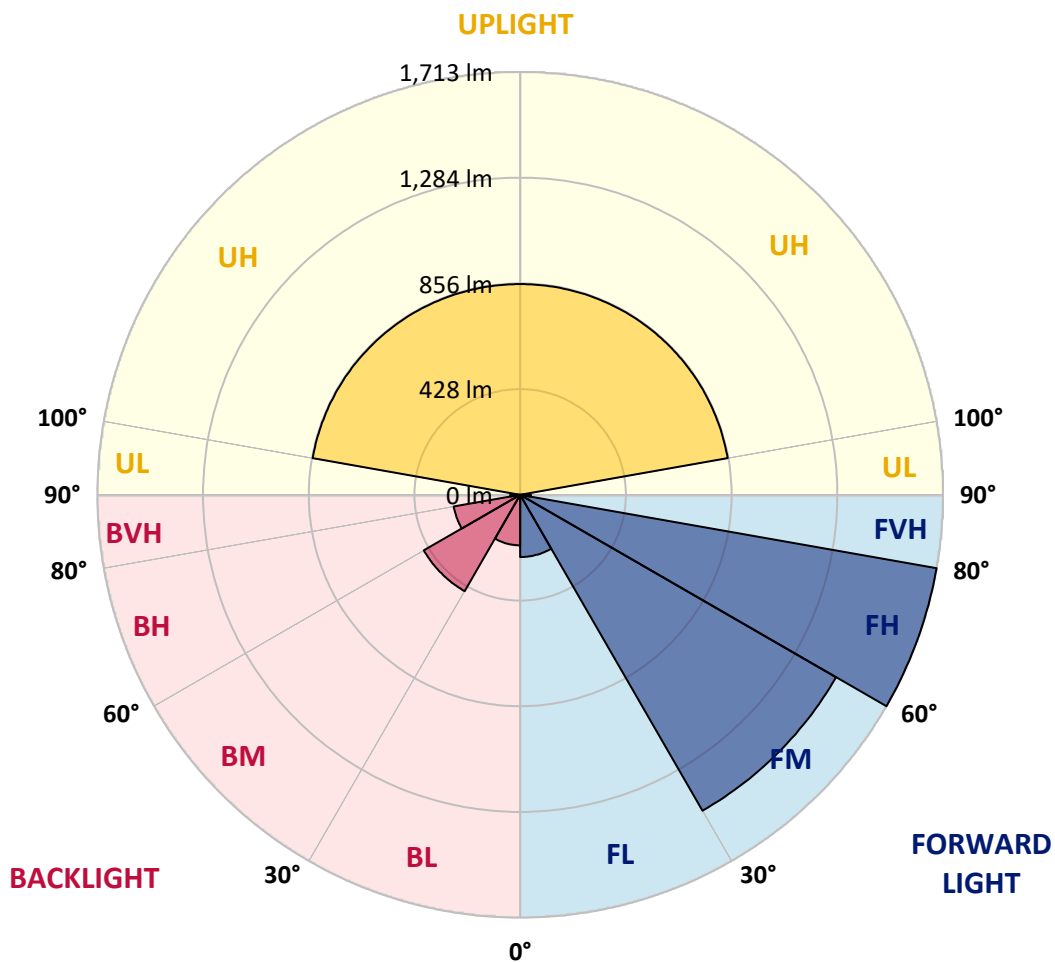
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	251.9	4.1			
FM	(30°-60°)	1477.4	24.0			
FH	(60°-80°)	1712.6	27.8			G1/1800
FVH	(80°-90°)	44.3	0.7			G1/100
BL	(0°-30°)	204.7	3.3	B1/500		
BM	(30°-60°)	450.4	7.3	B1/1000		
BH	(60°-80°)	273.1	4.4	B1/500		G1/500
BVH	(80°-90°)	40.1	0.7			G1/100
UL	(90°-100°)	11.8	0.2		U2/50	
UH	(100°-180°)	853.5	13.9		U4/1000	

BUG Rating: B1-U5-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3
2.5°	603.6	603.0	603.0	597.8	595.8	592.6	590.1	586.2	582.3	577.8	572.0
5°	632.8	634.7	632.0	624.3	614.6	604.3	600.3	591.4	579.0	568.1	557.8
7.5°	660.5	661.2	654.1	641.1	626.3	610.1	605.0	592.6	579.0	564.2	549.3
10°	680.6	681.3	670.9	652.8	632.8	614.6	608.8	596.6	579.8	563.6	544.8
12.5°	692.2	692.9	677.3	658.5	634.7	616.6	611.4	598.5	581.0	560.4	539.6
15°	690.3	692.2	679.3	658.5	633.3	617.2	610.8	599.8	577.8	557.1	535.1
17.5°	677.3	679.8	669.6	647.0	626.8	614.0	606.9	595.8	574.6	552.5	528.7
20°	652.1	655.3	650.8	628.8	615.2	605.0	600.3	590.1	570.1	547.3	522.8
22.5°	623.7	626.8	625.6	607.5	601.1	595.8	591.4	583.6	566.1	543.6	520.3
25°	603.0	605.5	603.6	588.1	590.1	590.1	587.5	581.7	565.6	544.8	520.3
27.5°	637.3	637.3	620.5	588.7	585.5	591.4	590.1	586.9	573.8	551.3	525.5
30°	762.6	753.0	722.6	643.1	602.3	599.8	599.1	597.2	585.5	565.6	541.6
32.5°	902.9	893.2	857.1	757.5	672.8	617.2	611.4	612.0	608.8	590.1	566.1
35°	1027.6	1026.3	997.8	890.0	782.1	678.6	655.3	639.9	638.5	630.8	612.0
37.5°	1128.5	1128.5	1131.1	1008.3	900.3	776.2	736.8	687.7	687.7	683.1	671.6
40°	1243.5	1248.6	1254.4	1115.5	1027.0	892.6	848.0	773.6	751.1	758.1	760.8
42.5°	1394.7	1401.2	1397.3	1248.0	1142.6	1031.5	976.5	886.8	831.1	842.8	869.9
45°	1496.8	1499.5	1527.2	1386.4	1288.1	1149.1	1102.6	979.2	924.3	948.1	996.0
47.5°	1612.5	1618.9	1623.5	1543.4	1458.7	1282.3	1196.9	1069.1	1033.4	1069.6	1145.2
50°	1725.6	1717.2	1729.5	1726.3	1620.4	1400.5	1299.1	1153.1	1155.6	1204.6	1328.9
52.5°	1823.9	1795.4	1823.9	1859.4	1828.4	1522.1	1403.8	1251.9	1289.3	1349.4	1545.4
55°	1899.5	1830.9	1878.8	1979.7	1972.5	1629.3	1523.3	1383.7	1446.5	1528.5	1808.4
57.5°	1745.0	1753.4	1885.3	2060.4	2057.2	1738.0	1628.1	1548.6	1625.4	1717.2	2119.9
60°	1600.9	1638.4	1842.0	2073.4	2116.0	1856.2	1768.9	1736.0	1807.1	1918.9	2418.5
62.5°	1524.6	1560.2	1771.5	2049.4	2209.7	2031.3	1958.3	1933.2	2030.0	2155.4	2684.8
65°	1548.6	1570.6	1767.0	2085.7	2317.6	2296.2	2264.6	2222.7	2271.2	2388.8	2805.0
67.5°	1481.3	1517.6	1729.5	2149.6	2514.7	2619.5	2646.0	2600.8	2560.0	2543.9	2629.8
70°	1102.6	1137.5	1359.9	1885.3	2676.3	3180.4	3164.3	3013.1	2739.0	2510.2	2054.6
72°	700.6	690.9	860.8	1381.1	2379.0	3324.5	3400.8	3121.0	2657.5	2229.1	1395.3
72.5°	509.2	555.2	714.2	1227.9	2260.1	3245.8	3356.9	3086.0	2551.0	2105.6	1227.4
75°	124.1	131.2	171.3	440.1	1323.7	2442.4	2582.0	2384.2	1862.0	1249.9	544.2
77.5°	84.0	87.2	113.1	155.0	389.1	1392.8	1532.4	1316.6	833.1	425.3	242.4
80°	62.7	64.6	82.0	109.9	161.5	475.0	560.4	445.3	207.5	236.0	172.6
82.5°	43.9	45.3	62.1	80.8	107.3	111.2	148.0	163.5	134.5	154.5	100.8
85°	30.4	30.4	45.3	55.5	67.8	55.0	58.7	82.0	91.1	91.8	61.4
87.5°	16.2	18.1	26.5	35.6	35.6	25.2	27.8	42.0	51.0	55.0	36.8
90°	10.7	10.7	17.9	21.4	16.3	13.4	12.7	15.3	21.1	26.3	18.5
92.5°	4.0	4.0	4.9	5.9	5.9	5.9	6.2	6.8	6.8	5.9	5.9
95°	4.9	4.9	5.9	6.8	6.8	6.8	6.8	6.8	7.8	6.8	6.8
97.5°	6.8	6.8	7.8	7.8	8.8	8.8	9.7	11.8	9.8	8.8	7.8
100°	7.8	7.8	8.8	9.8	11.8	20.6	23.0	28.5	25.5	22.5	18.7
102.5°	10.8	10.8	12.8	17.7	26.5	39.3	42.2	49.0	46.2	41.2	38.3
105°	20.6	21.6	26.5	35.3	47.1	61.8	64.5	70.7	68.7	63.8	59.8
107.5°	40.2	41.2	48.1	57.0	71.7	86.3	88.4	93.2	92.3	88.3	85.4

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CATALOG NUMBER: IST-AF-800-LED-E1-T4W-7027-ULG

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
110°	64.8	66.7	72.7	85.4	100.1	111.9	113.6	117.8	118.8	116.8	113.8
112.5°	97.2	97.2	104.0	118.8	131.5	140.3	141.8	145.3	147.2	146.2	144.3
115°	137.4	136.5	144.3	156.0	164.9	170.8	172.3	175.7	178.7	175.7	173.7
117.5°	180.6	180.6	185.5	193.3	198.3	201.2	202.9	207.1	211.0	206.1	204.2
120°	220.8	218.8	221.8	228.7	232.6	238.5	239.4	241.5	245.3	240.5	238.5
122.5°	258.2	255.2	256.2	262.0	266.0	271.8	272.5	273.8	277.8	272.8	270.9
125°	292.5	288.5	290.5	293.5	299.3	304.3	305.2	307.2	309.2	304.3	304.3
127.5°	323.9	322.9	322.9	326.8	332.7	333.7	335.2	338.6	339.6	339.6	338.6
130°	356.3	354.3	355.3	359.2	363.2	365.1	366.6	370.0	374.0	374.0	372.0
132.5°	388.7	386.7	385.7	393.5	396.5	397.5	399.3	403.4	408.3	406.3	406.3
135°	421.0	418.1	418.1	424.0	427.0	428.9	430.6	434.8	439.7	438.7	441.7
137.5°	451.5	448.5	450.5	451.5	455.4	459.3	460.8	464.2	466.2	467.2	472.1
140°	479.0	476.0	478.0	480.0	481.9	487.8	488.7	490.7	492.7	494.7	499.5
142.5°	508.4	505.5	507.5	508.4	511.3	515.3	515.9	517.2	523.2	523.2	524.1
145°	539.8	535.9	534.0	536.8	539.8	540.8	542.3	545.7	551.6	550.6	547.7
147.5°	564.3	561.4	560.5	563.3	563.3	564.3	565.8	569.3	574.2	575.2	572.2
150°	584.0	581.0	582.0	582.0	582.0	582.0	583.2	586.0	588.9	591.8	594.8
152.5°	599.7	596.7	596.7	597.7	598.7	598.7	599.0	599.7	602.7	606.5	611.5
155°	617.3	613.5	613.5	615.4	618.3	616.3	615.8	614.4	619.3	624.2	626.2
157.5°	634.0	631.1	631.1	632.0	634.0	633.0	632.8	632.0	636.0	638.0	638.0
160°	650.7	647.8	646.8	643.8	642.8	642.8	643.7	645.8	651.7	648.8	647.8
162.5°	660.5	656.6	656.6	652.7	648.8	650.7	651.9	654.7	658.5	657.6	655.7
165°	668.4	665.5	663.5	663.5	660.5	660.5	660.3	659.5	664.5	667.4	665.5
167.5°	677.2	674.3	671.3	673.3	675.3	672.3	670.2	665.5	671.3	675.3	675.3
170°	685.0	682.2	679.2	679.2	680.2	678.2	676.7	673.3	676.2	681.2	683.1
172.5°	686.0	684.1	682.2	680.2	677.2	677.2	677.0	676.2	679.2	681.2	683.1
175°	687.0	685.0	684.1	682.2	678.2	677.2	677.2	677.2	682.2	683.1	681.2
177.5°	693.9	692.0	687.0	686.0	684.1	682.2	681.8	681.2	686.0	688.0	685.0
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3
2.5°	570.7	566.8	561.6	559.0	557.8	555.2	552.5	551.3	551.3	548.8	549.3
5°	552.5	546.8	539.6	534.5	533.9	533.9	535.1	535.1	535.7	533.9	536.5
7.5°	543.6	537.1	526.8	520.8	516.3	515.8	518.3	523.5	526.0	524.1	526.8
10°	537.1	530.0	518.3	511.2	508.0	506.7	508.6	513.8	522.3	522.3	524.8
12.5°	530.6	521.6	510.0	504.8	502.2	502.8	505.4	509.2	518.3	521.6	522.8
15°	524.1	513.8	504.1	497.0	497.0	499.0	502.2	506.7	515.1	520.8	522.3
17.5°	517.7	507.4	499.0	493.1	493.1	495.8	499.0	504.8	510.6	519.0	519.0
20°	511.9	503.5	492.5	487.3	486.6	488.6	492.5	498.3	502.8	511.2	511.9
22.5°	508.6	498.3	488.0	480.2	477.0	475.7	479.5	485.4	489.8	498.3	499.5
25°	507.4	495.8	482.7	468.6	460.2	457.6	459.6	466.6	470.5	477.0	478.9
27.5°	511.9	500.9	480.9	455.0	437.6	430.5	432.4	436.8	438.2	445.3	448.5
30°	527.3	514.5	484.7	440.8	409.1	396.2	396.2	396.8	398.8	404.6	405.2
32.5°	552.5	540.3	496.3	426.0	380.1	361.9	357.3	354.2	354.2	353.6	354.2
35°	599.1	588.7	516.3	409.1	348.4	328.3	317.3	311.5	305.7	303.1	302.5
37.5°	666.4	657.3	544.8	389.8	320.5	300.6	287.0	275.3	268.9	268.2	271.5
40°	766.5	757.5	576.5	367.8	294.0	279.2	265.0	252.7	245.6	246.2	249.5
42.5°	890.0	862.1	610.8	338.0	272.7	265.0	249.5	239.1	232.0	228.2	227.5
45°	1034.1	987.6	643.1	310.3	249.5	252.7	237.8	226.2	217.2	206.8	205.5
47.5°	1213.8	1112.9	671.6	282.4	224.3	239.8	225.6	214.5	201.0	188.7	186.8
50°	1401.2	1257.1	696.1	252.7	201.7	225.6	213.3	198.4	179.8	168.7	168.7
52.5°	1617.7	1430.3	727.8	219.7	184.2	210.0	197.8	178.3	162.9	161.5	161.5
55°	1858.8	1611.9	749.7	193.9	170.6	193.2	187.5	181.5	176.4	177.8	178.3
57.5°	2110.8	1801.2	730.3	175.8	159.6	189.4	206.3	198.4	182.3	181.5	181.0
60°	2328.0	1948.6	623.1	164.2	151.3	195.8	221.1	198.4	182.3	190.7	191.2
62.5°	2470.2	2018.4	414.9	149.3	139.0	184.8	215.9	192.6	183.0	206.8	208.8
65°	2450.8	1940.2	238.5	139.0	131.2	170.0	208.8	185.5	170.6	184.2	180.3
67.5°	2162.0	1626.1	172.6	134.5	125.3	159.6	195.8	175.2	159.0	175.8	168.7
70°	1553.7	1107.1	148.7	130.5	121.5	147.3	186.8	168.7	152.5	164.2	153.3
72°	1042.6	673.5	136.4	127.3	117.6	139.6	180.3	163.5	146.7	153.3	140.9
72.5°	887.3	531.3	133.2	126.0	116.3	137.7	178.3	162.2	145.4	151.8	140.2
75°	331.6	208.0	118.3	116.3	107.3	128.0	170.6	156.5	139.0	137.0	131.8
77.5°	170.6	131.8	100.8	102.8	96.3	117.0	162.2	147.3	128.0	120.8	118.3
80°	124.1	95.7	81.5	87.2	82.0	105.3	150.6	133.8	116.3	108.5	105.3
82.5°	78.2	59.5	62.1	69.2	69.8	93.1	137.0	120.2	103.5	96.9	91.8
85°	37.5	35.6	43.9	51.0	56.2	78.8	125.3	106.7	90.5	77.5	78.2
87.5°	20.0	27.2	26.5	34.2	43.3	64.6	111.2	87.2	72.4	58.2	58.7
90°	11.4	13.9	16.6	22.4	24.3	34.7	79.6	57.6	55.3	25.6	23.0
92.5°	5.9	5.9	5.9	6.8	6.8	5.9	5.9	5.9	4.9	4.0	4.0
95°	6.8	6.8	6.8	7.8	6.8	6.8	6.8	6.8	5.9	4.9	4.9
97.5°	7.8	7.8	8.8	9.8	11.8	8.8	8.8	7.8	7.8	6.8	6.8
100°	18.7	18.7	22.5	25.5	28.5	20.6	11.8	9.8	8.8	7.8	7.8
102.5°	37.3	38.3	41.2	46.2	49.0	39.3	26.5	17.7	12.8	10.8	10.8
105°	59.8	59.8	63.8	68.7	70.7	61.8	47.1	35.3	26.5	21.6	20.6
107.5°	84.4	85.4	88.3	92.3	93.2	86.3	71.7	57.0	48.1	41.2	40.2



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	114.8	113.8	116.8	118.8	117.8	111.9	100.1	85.4	72.7	66.7	64.8
112.5°	144.3	144.3	146.2	147.2	145.3	140.3	131.5	118.8	104.0	97.2	97.2
115°	174.7	173.7	175.7	178.7	175.7	170.8	164.9	156.0	144.3	136.5	137.4
117.5°	205.2	204.2	206.1	211.0	207.1	201.2	198.3	193.3	185.5	180.6	180.6
120°	238.5	238.5	240.5	245.3	241.5	238.5	232.6	228.7	221.8	218.8	220.8
122.5°	271.8	270.9	272.8	277.8	273.8	271.8	266.0	262.0	256.2	255.2	258.2
125°	304.3	304.3	304.3	309.2	307.2	304.3	299.3	293.5	290.5	288.5	292.5
127.5°	340.5	338.6	339.6	339.6	338.6	333.7	332.7	326.8	322.9	322.9	323.9
130°	373.0	372.0	374.0	374.0	370.0	365.1	363.2	359.2	355.3	354.3	356.3
132.5°	407.3	406.3	406.3	408.3	403.4	397.5	396.5	393.5	385.7	386.7	388.7
135°	442.7	441.7	438.7	439.7	434.8	428.9	427.0	424.0	418.1	418.1	421.0
137.5°	473.0	472.1	467.2	466.2	464.2	459.3	455.4	451.5	450.5	448.5	451.5
140°	501.5	499.5	494.7	492.7	490.7	487.8	481.9	480.0	478.0	476.0	479.0
142.5°	526.0	524.1	523.2	523.2	517.2	515.3	511.3	508.4	507.5	505.5	508.4
145°	549.7	547.7	550.6	551.6	545.7	540.8	539.8	536.8	534.0	535.9	539.8
147.5°	574.2	572.2	575.2	574.2	569.3	564.3	563.3	563.3	560.5	561.4	564.3
150°	598.7	594.8	591.8	588.9	586.0	582.0	582.0	582.0	582.0	581.0	584.0
152.5°	616.3	611.5	606.5	602.7	599.7	598.7	598.7	597.7	596.7	596.7	599.7
155°	629.2	626.2	624.2	619.3	614.4	616.3	618.3	615.4	613.5	613.5	617.3
157.5°	642.8	638.0	638.0	636.0	632.0	633.0	634.0	632.0	631.1	631.1	634.0
160°	653.7	647.8	648.8	651.7	645.8	642.8	642.8	643.8	646.8	647.8	650.7
162.5°	661.5	655.7	657.6	658.5	654.7	650.7	648.8	652.7	656.6	656.6	660.5
165°	669.3	665.5	667.4	664.5	659.5	660.5	660.5	663.5	663.5	665.5	668.4
167.5°	681.2	675.3	675.3	671.3	665.5	672.3	675.3	673.3	671.3	674.3	677.2
170°	688.0	683.1	681.2	676.2	673.3	678.2	680.2	679.2	679.2	682.2	685.0
172.5°	688.0	683.1	681.2	679.2	676.2	677.2	677.2	680.2	682.2	684.1	686.0
175°	686.0	681.2	683.1	682.2	677.2	677.2	678.2	682.2	684.1	685.0	687.0
177.5°	689.0	685.0	688.0	686.0	681.2	682.2	684.1	686.0	687.0	692.0	693.9
180°	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0	687.0

(END OF REPORT)