

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: P227114

Luminaire Tested: **IST-AF-450-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35947)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-450-LED-E1-SL4-7030
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV W/SPILL CONTROL
Light Source: (16) 3000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2483.3 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U1 - G1

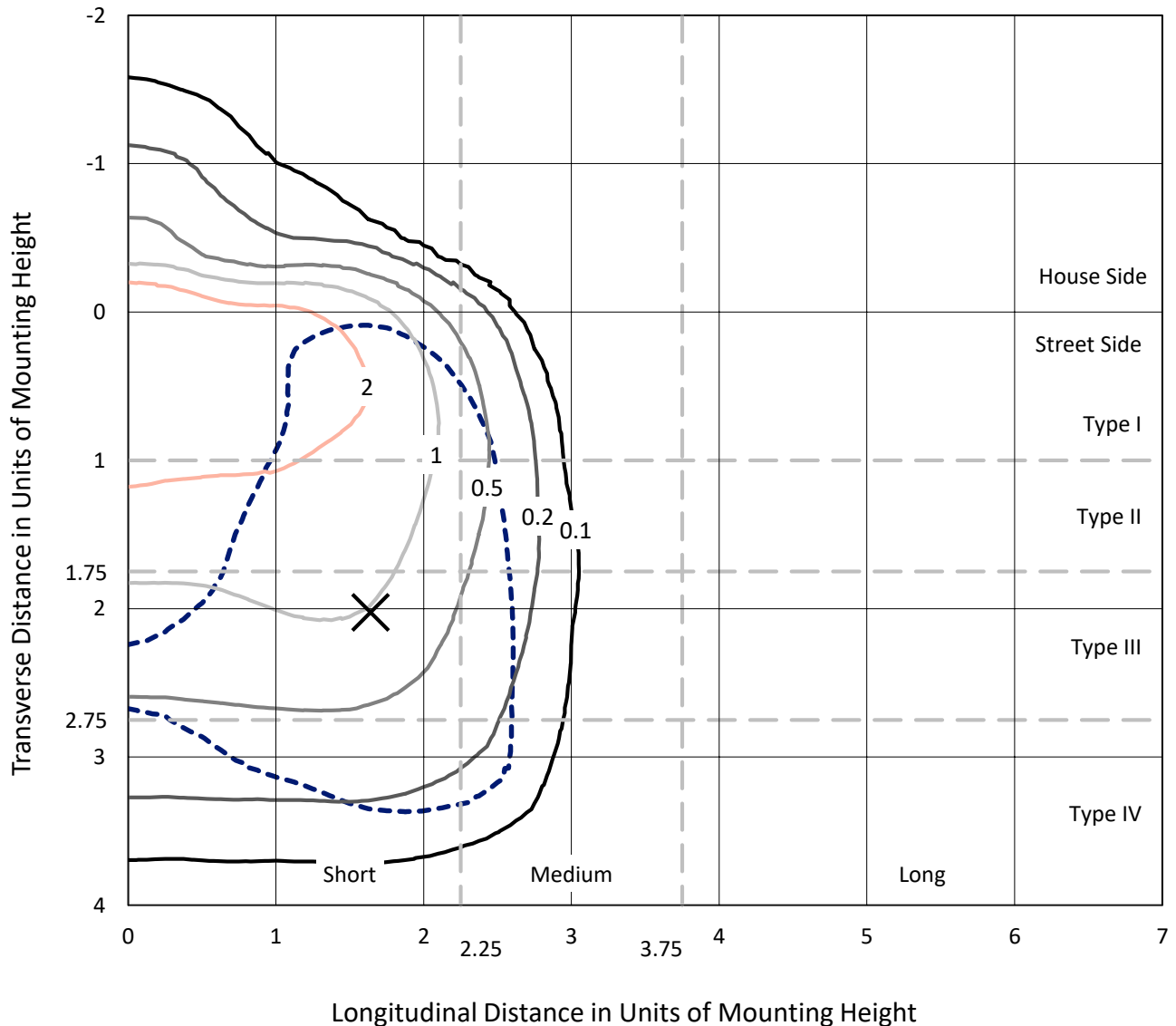
Input Watts (W): 25.31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

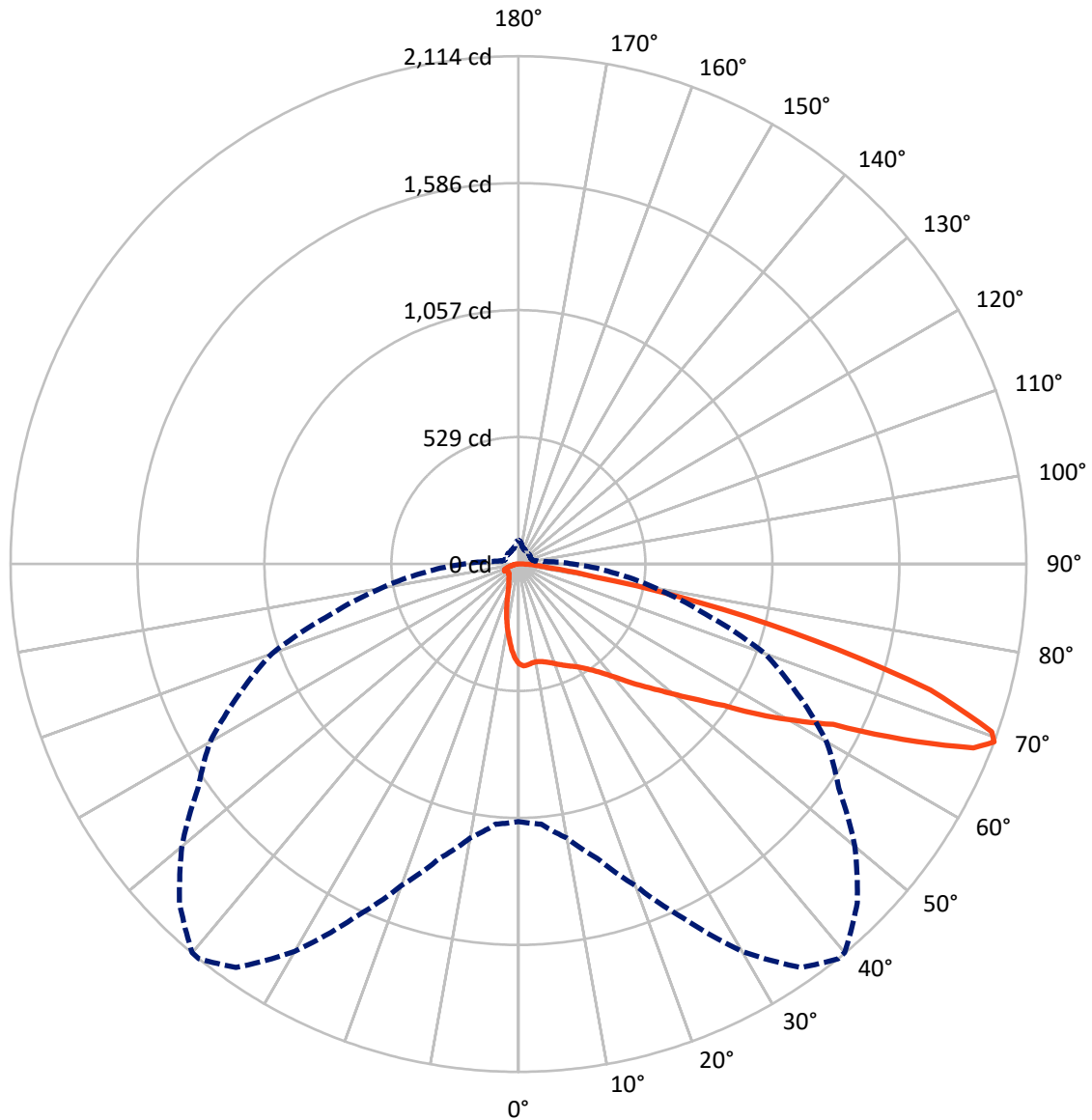
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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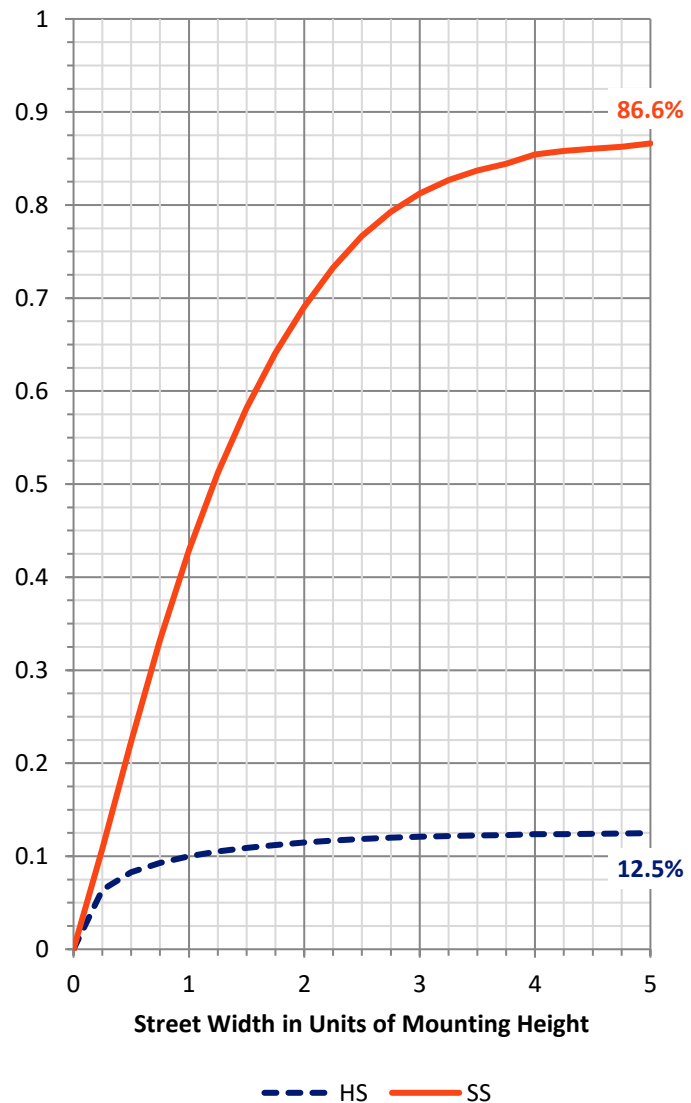
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	314.2	0.1	314.3
	% Fixture	12.7	0.0	12.7
Street Side	Lumens	2168.4	0.6	2169.0
	% Fixture	87.3	0.0	87.3
Total	Lumens	2482.6	0.7	2483.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	1.4
10°-20°	90.5	3.6
20°-30°	140.9	5.7
30°-40°	213.0	8.6
40°-50°	340.8	13.7
50°-60°	535.6	21.6
60°-70°	721.2	29.0
70°-80°	357.7	14.4
80°-90°	47.0	1.9
90°-100°	0.7	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2482.6	100.0
0°-180°	2483.3	100.0



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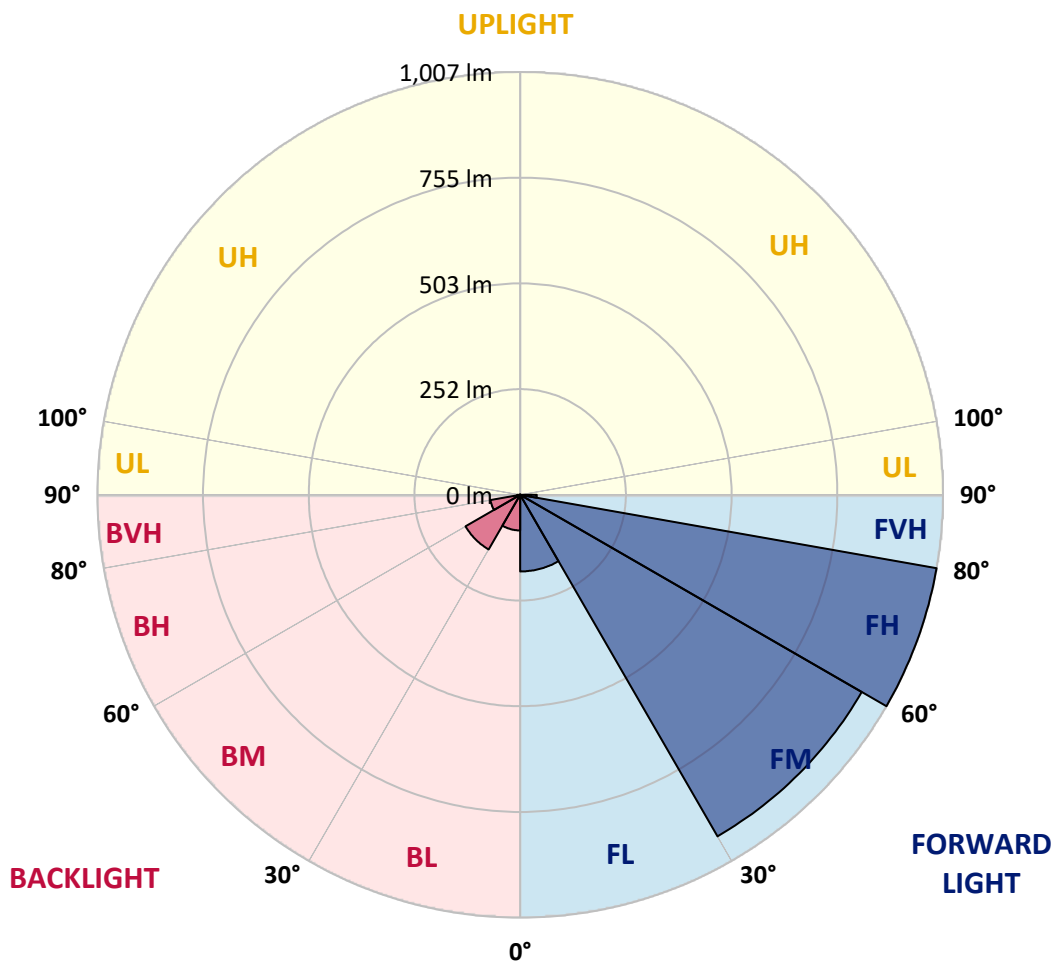
CATALOG NUMBER: IST-AF-450-LED-E1-SL4-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	182.6	7.4			
FM	(30°-60°)	939.2	37.8			
FH	(60°-80°)	1007.0	40.6			G1/1800
FVH	(80°-90°)	39.6	1.6			G1/100
BL	(0°-30°)	84.8	3.4	B0/110		
BM	(30°-60°)	150.1	6.0	B0/220		
BH	(60°-80°)	71.9	2.9	B0/110		G0/110
BVH	(80°-90°)	7.4	0.3			G0/10
UL	(90°-100°)	0.7	0.0		U1/10	
UH	(100°-180°)	0.1	0.0		U1/10	

BUG Rating: B0-U1-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
0°	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9
2.5°	426.0	426.4	426.4	426.8	425.2	425.2	425.6	424.0	424.8	424.4	422.4
5°	426.8	427.2	426.8	427.2	425.2	424.4	422.8	420.8	421.6	421.2	418.3
7.5°	424.8	425.2	424.4	424.8	422.4	420.8	418.3	416.7	415.5	415.1	411.5
10°	420.4	421.6	420.0	421.2	419.1	417.5	416.3	414.7	413.9	413.5	409.5
12.5°	413.9	414.7	415.1	416.7	416.7	417.1	417.1	415.9	416.3	415.9	412.7
15°	407.9	410.7	413.5	415.1	418.3	420.4	422.0	421.6	422.8	422.4	420.4
17.5°	407.9	410.3	415.1	420.4	426.4	429.2	431.6	431.6	432.0	431.2	428.0
20°	409.5	413.9	422.0	430.8	438.1	443.7	445.3	444.9	443.3	443.3	437.7
22.5°	422.8	425.6	434.5	444.1	454.2	459.9	460.3	459.0	455.8	455.0	448.2
25°	441.7	444.9	453.0	465.5	473.2	477.6	476.4	472.3	469.1	466.3	459.0
27.5°	471.1	473.6	481.6	490.1	494.5	496.1	491.3	485.6	482.0	480.8	471.1
30°	501.4	504.6	511.0	516.3	519.9	515.1	507.4	501.0	497.7	496.9	488.1
32.5°	538.4	538.8	543.3	544.5	544.9	536.8	526.3	520.3	519.1	517.5	510.6
35°	572.3	574.3	573.5	573.1	569.5	559.4	550.5	546.9	545.7	545.3	539.6
37.5°	602.5	605.7	603.7	600.1	595.7	587.6	578.3	574.3	578.3	575.9	577.1
40°	631.9	631.9	629.5	627.5	622.3	614.6	611.4	611.8	618.2	619.9	621.5
42.5°	657.3	656.9	654.5	652.9	652.1	650.5	648.9	656.5	669.0	671.4	675.1
45°	685.1	684.7	675.5	678.7	684.3	685.5	691.2	708.9	724.2	725.4	733.1
47.5°	712.1	708.9	700.1	703.3	719.4	727.9	737.1	762.1	783.5	787.9	809.3
50°	740.4	737.1	727.5	733.5	756.1	771.8	793.6	828.2	857.6	863.7	891.5
52.5°	769.8	769.4	761.7	771.0	798.8	830.6	864.9	904.0	939.9	947.5	988.6
55°	805.2	803.2	800.0	811.3	850.8	893.5	947.1	1000.3	1039.4	1053.1	1094.6
57.5°	845.1	844.3	844.7	868.1	915.7	980.6	1046.3	1118.0	1182.5	1192.1	1230.8
60°	879.8	881.4	890.7	927.4	987.0	1074.9	1167.2	1264.3	1321.5	1331.6	1369.5
62.5°	922.1	931.4	951.9	998.3	1068.4	1174.8	1294.5	1397.3	1471.0	1491.6	1563.3
65°	1023.7	1030.9	1069.2	1125.2	1214.7	1350.9	1488.4	1637.9	1759.6	1778.1	1839.8
67.5°	1097.8	1116.4	1176.4	1267.9	1397.3	1571.4	1760.0	1941.0	2043.7	2052.2	2009.1
69°	1072.0	1087.4	1158.3	1268.7	1424.7	1627.4	1862.0	2051.0	2114.3	2112.7	1995.4
70°	1032.5	1046.7	1124.8	1232.0	1401.7	1621.0	1863.6	2051.8	2090.1	2075.6	1941.4
72.5°	864.9	877.4	950.7	1062.8	1227.2	1444.8	1673.4	1801.9	1793.9	1781.8	1560.1
75°	540.1	539.2	603.3	668.2	796.0	1016.0	1186.1	1289.3	1272.8	1263.5	1001.5
77.5°	201.9	216.0	239.4	309.1	368.0	486.9	624.3	739.1	771.0	730.3	539.2
80°	105.2	112.8	128.2	152.7	175.7	201.1	241.8	311.1	322.0	300.3	217.6
82.5°	83.0	92.3	107.6	128.6	144.7	135.0	127.4	131.8	131.0	124.9	110.8
85°	62.9	73.8	98.7	120.1	143.1	120.9	96.3	84.2	75.0	75.4	80.2
87.5°	31.4	40.7	77.8	104.8	124.5	80.2	62.9	48.8	40.7	39.1	52.4
90°	9.7	9.7	15.7	20.6	28.2	14.1	13.7	10.5	7.7	7.7	12.1
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	39°	40°	45°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9
2.5°	420.8	420.8	420.0	419.5	418.3	416.7	415.5	413.5	412.3	410.3	407.9
5°	415.5	413.9	413.1	411.5	409.1	407.1	404.6	401.8	398.6	394.6	390.1
7.5°	408.7	406.2	403.4	402.6	399.8	397.4	394.6	390.5	386.1	378.8	373.2
10°	405.8	403.4	401.0	399.4	395.8	392.9	389.7	384.5	378.8	369.2	358.7
12.5°	408.7	406.2	403.8	401.0	397.8	394.6	390.1	383.7	376.0	363.5	350.6
15°	415.5	413.1	409.1	406.2	401.8	399.0	392.9	385.7	374.4	359.1	342.2
17.5°	423.2	419.5	415.9	411.5	407.5	403.8	397.4	388.1	374.0	355.9	334.1
20°	430.4	426.4	420.8	417.5	413.5	408.3	401.4	390.1	373.2	349.4	325.6
22.5°	438.9	433.7	427.6	424.0	420.8	416.3	408.3	393.8	373.2	345.8	316.0
25°	449.8	442.9	436.9	433.3	431.2	428.0	418.3	402.2	376.0	343.8	307.9
27.5°	462.7	453.8	448.6	446.1	445.7	443.3	433.7	413.5	382.5	343.8	300.3
30°	478.0	470.3	463.5	463.5	468.3	466.7	455.8	430.8	392.5	345.0	294.6
32.5°	499.3	491.7	487.7	491.7	496.9	498.5	486.0	455.4	409.1	350.6	289.0
35°	530.8	525.9	523.1	529.2	539.6	543.7	528.4	492.1	433.3	361.5	285.7
37.5°	572.3	568.7	565.0	575.5	595.3	603.3	581.2	534.4	467.9	379.6	284.1
40°	619.9	620.3	624.3	645.2	664.2	681.1	656.1	598.5	515.5	405.4	285.7
42.5°	676.3	680.7	694.4	723.4	760.1	773.4	749.2	675.9	574.7	436.5	289.8
45°	746.4	758.1	781.5	824.6	868.9	889.5	855.2	773.4	649.3	486.0	301.1
47.5°	821.0	846.8	886.3	938.6	990.2	1003.5	961.2	861.7	722.2	530.0	318.4
50°	916.5	947.9	987.4	1050.3	1105.1	1113.2	1057.1	943.5	785.9	568.3	334.9
52.5°	1005.5	1048.3	1098.6	1171.6	1227.2	1217.1	1144.6	1016.4	836.3	594.5	344.2
55°	1127.3	1171.6	1228.4	1292.1	1347.3	1323.1	1224.0	1078.5	876.6	613.8	347.0
57.5°	1266.3	1300.2	1355.8	1421.1	1457.3	1415.8	1302.2	1138.9	914.9	614.2	324.8
60°	1402.9	1442.4	1503.7	1567.8	1587.9	1516.2	1356.6	1148.2	877.0	548.1	260.0
62.5°	1605.2	1645.1	1676.2	1686.7	1650.4	1506.1	1293.3	1050.3	756.1	432.4	184.2
65°	1831.3	1786.2	1726.2	1669.7	1571.0	1351.7	1115.2	862.9	586.8	289.0	127.0
67.5°	1890.6	1753.2	1622.6	1496.8	1312.7	1076.5	841.1	607.0	376.4	164.4	86.2
69°	1828.9	1628.2	1482.7	1283.2	1093.0	805.6	579.5	388.9	224.9	114.5	72.1
70°	1716.1	1507.3	1310.2	1096.6	846.8	615.4	385.3	254.7	146.7	83.4	64.9
72.5°	1294.9	1035.4	798.0	518.3	316.0	175.3	123.3	88.3	69.7	61.3	55.6
75°	748.8	498.5	326.4	174.1	103.2	76.6	66.9	59.6	55.2	53.2	48.4
77.5°	316.0	197.5	133.8	97.9	69.3	59.2	51.6	47.6	47.2	45.9	41.5
80°	143.9	123.3	105.2	73.8	52.8	45.1	39.5	38.7	39.5	38.3	33.9
82.5°	106.8	105.2	87.9	56.8	40.3	30.2	24.6	25.8	29.0	31.4	27.4
85°	89.1	89.1	73.8	42.3	26.6	19.3	18.9	21.4	24.2	26.2	22.2
87.5°	81.8	78.6	42.3	21.8	15.3	12.5	11.7	10.5	10.5	18.1	15.3
90°	8.1	3.6	2.0	1.6	2.0	1.6	2.4	2.0	2.0	2.0	2.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: IST-AF-450-LED-E1-SL4-7030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227114

CATALOG NUMBER: IST-AF-450-LED-E1-SL4-7030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9	415.9
2.5°	405.8	404.2	400.2	399.4	398.2	396.6	396.2	394.2	390.1	389.3	389.7
5°	387.3	380.9	376.4	372.8	370.0	362.7	359.9	356.7	351.0	349.4	347.0
7.5°	365.5	357.9	349.0	342.6	334.9	327.3	321.2	313.6	307.5	303.9	297.4
10°	348.6	338.1	326.4	313.6	303.5	291.8	284.1	275.3	265.6	256.7	250.3
12.5°	335.7	321.2	304.3	289.0	274.5	262.0	248.3	235.8	223.7	211.6	201.1
15°	325.2	307.1	285.7	266.4	248.7	230.1	214.8	197.5	182.2	171.7	158.4
17.5°	314.0	290.6	265.2	242.6	219.6	200.3	181.0	162.8	148.3	134.6	123.7
20°	300.3	272.0	244.6	218.4	192.2	170.1	150.3	133.0	118.9	108.0	100.0
22.5°	284.9	251.9	220.1	191.4	165.2	143.5	124.9	112.0	101.6	95.5	93.1
25°	270.0	232.1	196.3	164.8	138.6	120.1	107.6	96.7	91.5	89.1	89.1
27.5°	256.3	212.0	172.1	141.5	116.1	101.6	91.9	87.5	85.0	85.0	86.2
30°	243.4	191.8	149.1	118.1	97.9	87.1	81.8	80.2	80.6	82.2	83.8
32.5°	228.5	172.5	129.4	101.6	85.0	77.8	73.8	74.2	76.2	79.0	81.8
35°	212.8	151.9	112.0	89.1	76.2	70.5	68.1	68.5	71.3	75.0	77.8
37.5°	198.7	135.4	98.7	79.4	69.7	66.1	64.1	64.5	66.5	70.9	74.6
40°	184.6	121.3	87.9	73.8	66.1	62.5	61.3	60.9	62.5	66.5	70.9
42.5°	172.5	109.2	81.4	69.7	63.7	60.5	58.8	58.8	59.6	62.9	67.3
45°	165.2	102.0	77.0	66.9	61.7	58.8	57.2	56.4	57.6	59.6	63.7
47.5°	165.2	98.3	74.2	64.9	60.1	57.6	55.6	55.2	55.6	57.6	61.7
50°	170.9	99.1	73.8	64.1	59.2	56.0	54.0	54.0	54.8	57.6	60.9
52.5°	175.7	100.8	75.0	64.9	59.2	55.2	52.8	52.4	53.6	56.4	59.2
55°	174.9	100.8	76.2	66.1	60.5	55.6	52.4	52.0	52.8	55.6	58.4
57.5°	156.4	94.7	75.0	66.9	62.1	57.6	54.4	53.2	54.0	56.4	58.8
60°	126.5	84.2	71.7	66.9	64.5	61.3	58.0	57.2	57.6	60.1	62.9
62.5°	99.1	75.0	67.7	66.5	65.7	64.1	62.9	62.1	62.1	64.1	66.5
65°	80.6	67.7	64.5	64.9	65.7	65.3	64.9	64.5	64.5	65.7	68.1
67.5°	67.3	60.9	60.1	61.3	62.1	62.5	62.9	62.5	62.9	64.1	66.9
69°	61.3	57.2	56.4	57.2	58.8	59.2	60.1	59.6	60.1	61.3	64.1
70°	57.6	54.4	53.6	54.8	56.0	56.4	57.2	56.8	57.2	58.4	61.3
72.5°	50.0	46.3	45.1	45.9	47.2	47.2	48.4	48.8	48.0	48.4	50.4
75°	42.7	38.7	36.7	37.1	37.1	37.1	37.9	37.9	37.1	36.7	37.1
77.5°	35.9	31.4	29.0	29.0	29.0	28.6	27.4	27.8	28.2	27.8	28.2
80°	28.2	24.6	22.2	22.2	22.2	21.4	21.0	21.0	21.8	22.6	22.2
82.5°	21.8	18.1	16.9	16.5	16.5	15.7	15.7	16.5	16.1	16.5	17.3
85°	15.7	12.9	11.7	12.1	11.7	10.9	11.3	12.5	12.5	12.1	12.9
87.5°	9.7	8.1	7.7	8.1	7.3	6.0	5.6	6.0	6.9	6.4	7.3
90°	1.2	0.8	0.8	0.8	1.2	0.8	0.8	0.8	1.2	1.2	0.8
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P227114
 CATALOG NUMBER: IST-AF-450-LED-E1-SL4-7030

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

NUMBER: P227114
 NUMBER: IST-AF-450-LED-E1-SL4-7030

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
415.9	415.9	415.9	415.9	415.9
386.9	388.1	382.9	385.3	383.7
344.6	342.6	342.2	341.0	338.5
295.0	293.4	288.6	290.2	286.6
243.8	243.4	234.6	235.0	230.5
196.7	189.4	185.8	180.6	183.4
152.3	146.3	138.6	136.6	139.4
114.9	108.8	105.2	102.0	100.8
95.1	91.5	89.5	88.3	87.5
91.9	91.1	90.7	89.9	89.5
89.9	90.7	90.7	90.7	89.9
87.9	89.5	89.9	89.5	88.7
85.8	87.1	87.1	86.7	85.4
83.0	84.2	84.2	83.8	83.0
79.8	80.6	81.0	81.0	81.4
77.4	78.2	79.0	79.8	81.0
74.6	75.8	76.2	77.8	79.4
70.9	72.5	73.4	74.6	76.2
67.3	69.3	69.7	71.3	72.9
65.7	67.3	67.3	68.5	69.7
63.7	64.5	64.1	64.9	65.3
61.7	62.5	62.1	62.9	63.3
60.1	60.9	61.7	62.5	62.9
60.9	62.1	62.5	63.7	64.1
64.5	66.1	67.7	69.3	70.5
68.1	70.1	73.8	81.0	83.8
70.1	72.9	81.4	93.9	97.5
68.9	72.5	82.6	95.9	100.4
66.5	69.3	80.2	93.9	97.9
63.3	66.1	77.0	91.9	95.5
51.2	52.8	64.9	79.0	81.4
37.5	38.7	48.0	53.6	53.2
29.0	30.6	33.9	34.3	33.9
23.0	23.8	25.4	25.4	25.8
17.7	18.1	18.9	18.1	17.7
13.3	12.9	12.5	12.1	11.7
7.7	7.7	6.4	5.6	5.2
0.8	1.2	1.2	0.8	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	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

CANDELA DISTRIBUTION:

	160°
110°	0.0
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0



227114
 IST-AF-450-LED-E1-SL4-7030

TION (continued):

165°	170°	175°	180°
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	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	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	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
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	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

(END OF REPORT)