

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: P228200

Luminaire Tested: **ISS-AF-1200-LED-E1-SL3-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228200  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29762)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-1200-LED-E1-SL3-ULG  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III W/SPILL CONTROL, WITH UPLIGHT  
GLOW  
Light Source: (16) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

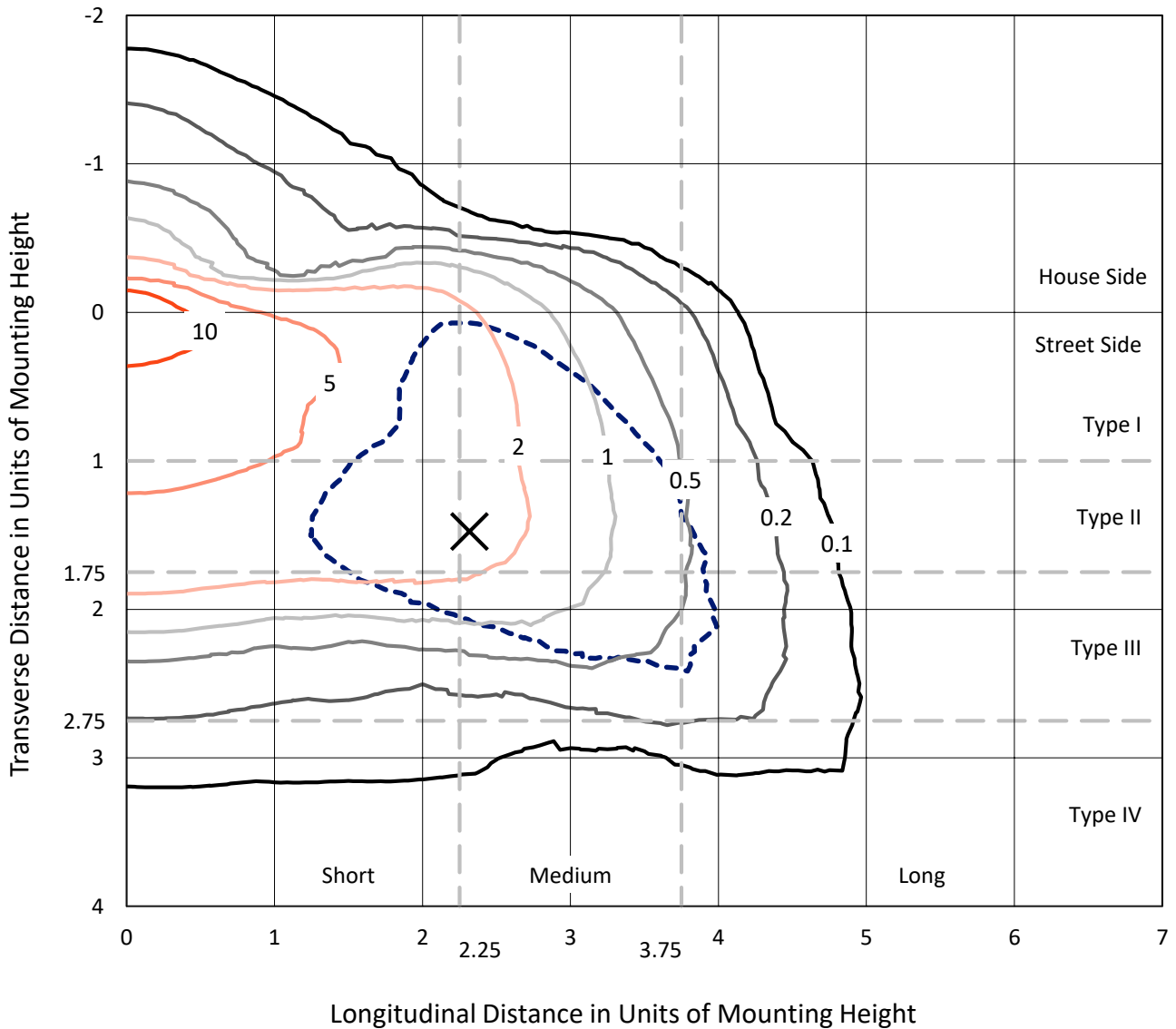
Lumens per Lamp: N/A  
Luminaire Lumens: 7721.4 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U5 - G2  
  
Input Watts (W): 82.7  
Input Voltage (V): 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

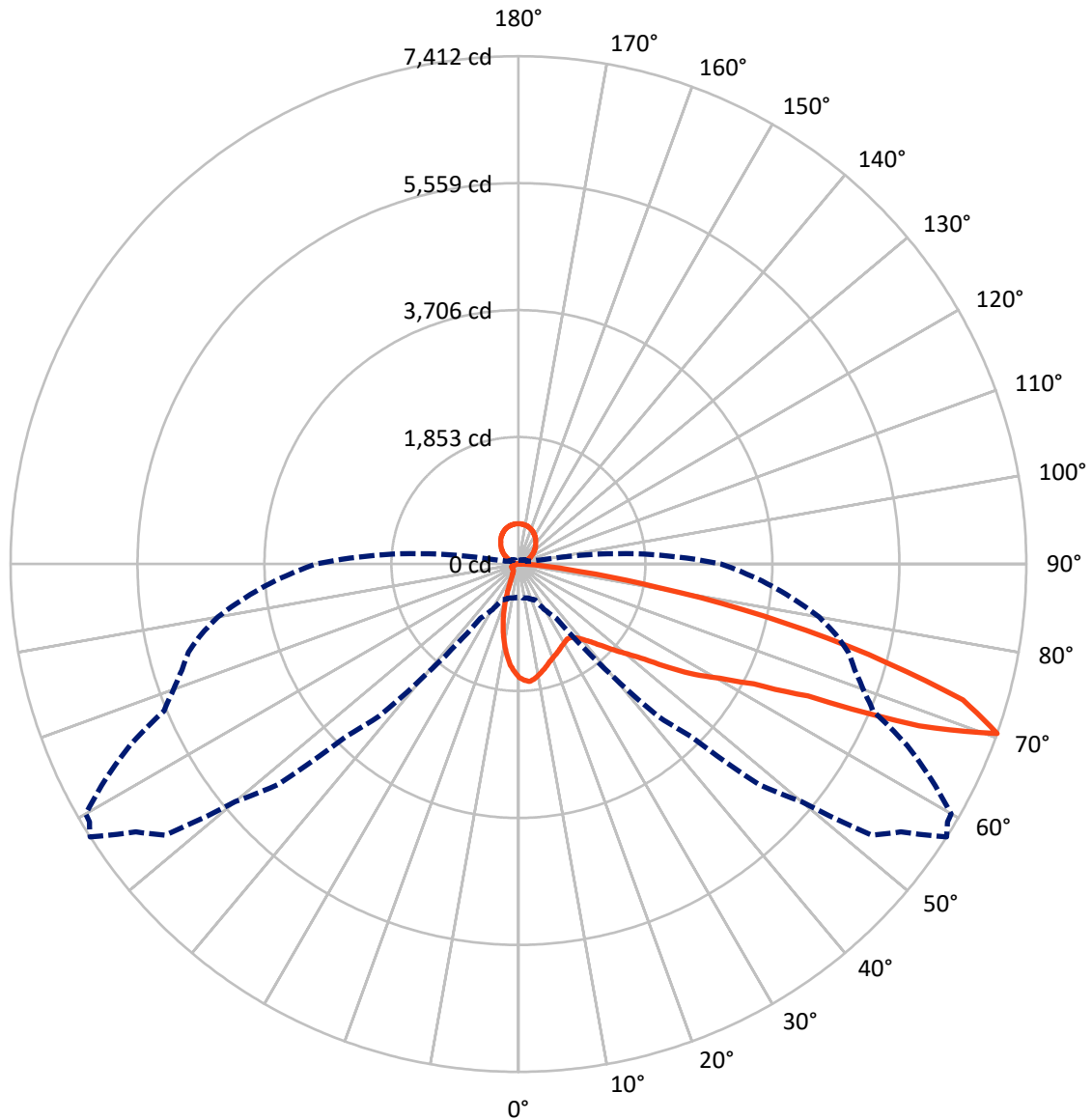
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.6 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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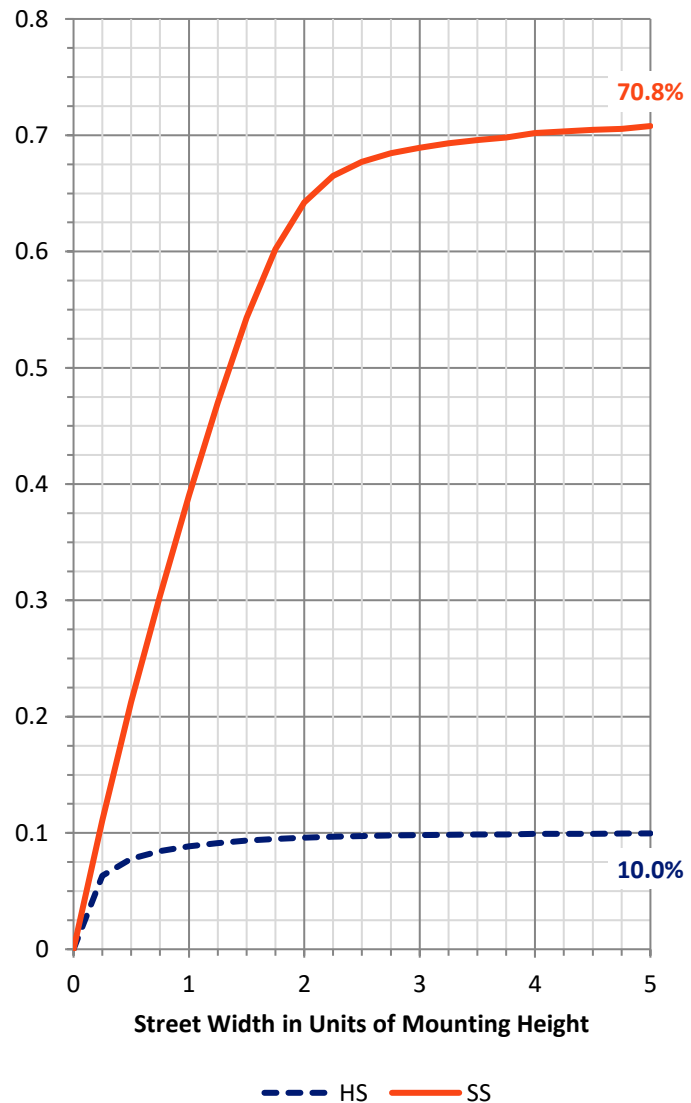
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	774.9	729.4	1504.4
	% Fixture	10.0	9.4	19.5
<b>Street Side</b>	Lumens	5487.5	729.4	6217.0
	% Fixture	71.1	9.4	80.5
<b>Total</b>	Lumens	6262.5	1458.9	7721.4
	% Fixture	81.1	18.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.1	1.9
10°-20°	310.7	4.0
20°-30°	390.5	5.1
30°-40°	510.3	6.6
40°-50°	765.7	9.9
50°-60°	1210.4	15.7
60°-70°	1744.7	22.6
70°-80°	1079.8	14.0
80°-90°	107.1	1.4
90°-100°	4.8	0.1
100°-110°	70.6	0.9
110°-120°	156.6	2.0
120°-130°	229.0	3.0
130°-140°	271.7	3.5
140°-150°	275.5	3.6
150°-160°	236.4	3.1
160°-170°	158.7	2.1
170°-180°	55.6	0.7
0°-90°	6262.5	81.1
0°-180°	7721.4	100.0



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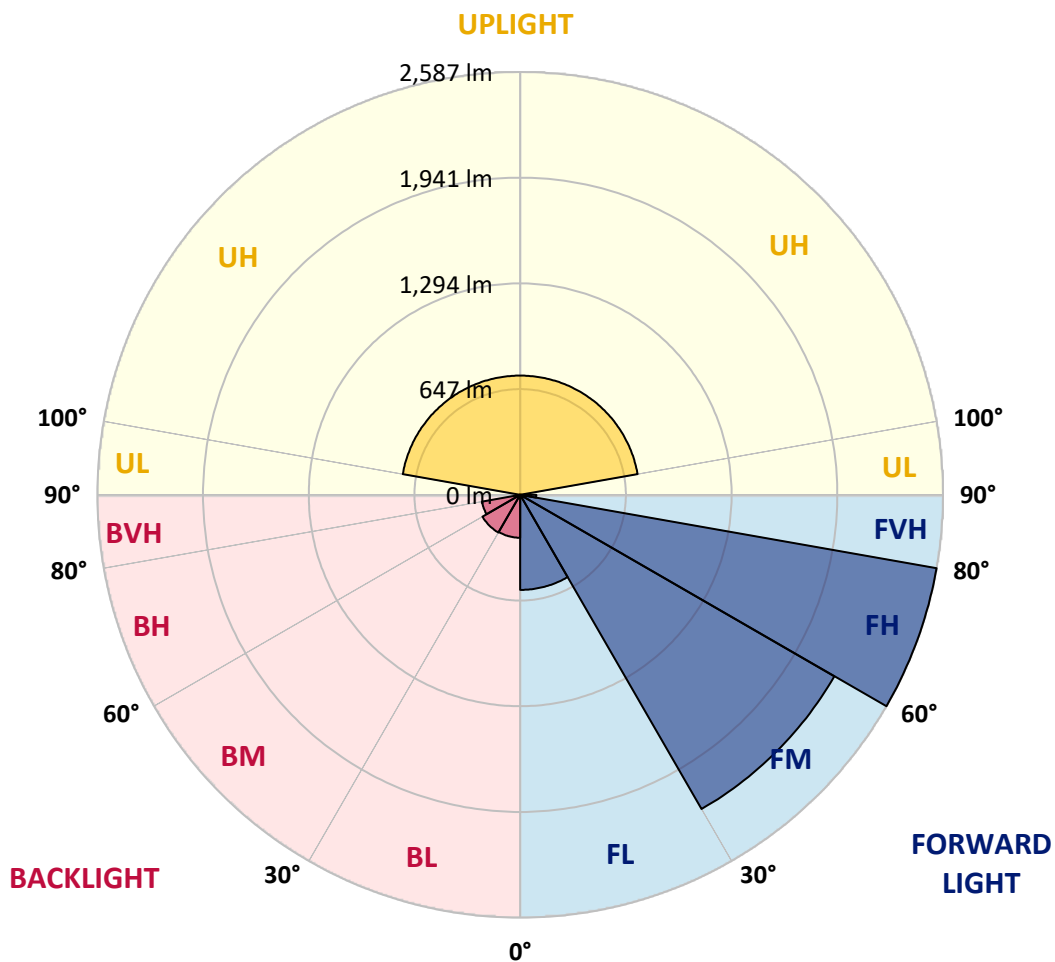
CATALOG NUMBER: ISS-AF-1200-LED-E1-SL3-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	581.6	7.5			
FM	(30°-60°)	2220.0	28.8			
FH	(60°-80°)	2587.4	33.5			G2/5000
FVH	(80°-90°)	98.6	1.3			G1/100
BL	(0°-30°)	262.7	3.4	B1/500		
BM	(30°-60°)	266.5	3.5	B1/1000		
BH	(60°-80°)	237.2	3.1	B1/500		G1/500
BVH	(80°-90°)	8.5	0.1			G0/10
UL	(90°-100°)	4.8	0.1		U1/10	
UH	(100°-180°)	729.4	9.4		U4/1000	

**BUG Rating: B1-U5-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6
2.5°	1739.8	1737.6	1733.1	1724.3	1719.8	1724.3	1719.8	1713.1	1704.2	1710.9	1706.5
5°	1735.3	1739.8	1730.9	1724.3	1735.3	1739.8	1730.9	1730.9	1722.0	1730.9	1726.4
7.5°	1648.7	1650.9	1653.1	1650.9	1679.8	1679.8	1675.4	1679.8	1682.0	1686.4	1688.7
10°	1539.8	1542.0	1546.5	1553.1	1588.7	1593.1	1595.4	1599.8	1606.4	1610.9	1624.2
12.5°	1430.9	1435.4	1444.3	1466.5	1504.2	1508.8	1515.4	1522.0	1533.2	1539.8	1564.3
15°	1339.9	1342.1	1350.9	1375.4	1430.9	1442.1	1446.5	1455.4	1477.6	1477.6	1504.2
17.5°	1255.4	1259.9	1266.5	1295.4	1350.9	1368.7	1382.0	1386.5	1415.4	1422.0	1453.2
20°	1190.9	1193.2	1195.4	1222.1	1273.2	1299.9	1310.9	1328.7	1350.9	1368.7	1395.4
22.5°	1155.4	1157.7	1153.2	1164.3	1208.7	1242.1	1255.4	1273.2	1282.1	1313.2	1328.7
25°	1157.7	1159.8	1148.8	1142.1	1164.3	1199.8	1211.0	1228.8	1224.3	1268.8	1268.8
27.5°	1179.9	1184.3	1173.2	1153.2	1155.4	1184.3	1190.9	1197.7	1184.3	1228.8	1219.9
30°	1224.3	1228.8	1215.4	1199.8	1175.4	1193.2	1193.2	1193.2	1168.7	1206.6	1190.9
32.5°	1270.9	1275.4	1270.9	1259.9	1228.8	1233.2	1224.3	1219.9	1186.5	1217.6	1193.2
35°	1339.9	1342.1	1344.3	1344.3	1299.9	1308.8	1284.3	1270.9	1239.8	1264.3	1230.9
37.5°	1422.0	1422.0	1437.7	1444.3	1395.4	1395.4	1368.7	1350.9	1322.1	1331.0	1297.6
40°	1495.3	1502.0	1537.6	1557.5	1513.1	1495.3	1473.2	1457.6	1435.4	1435.4	1402.1
42.5°	1579.8	1593.1	1635.4	1673.1	1648.7	1622.0	1599.8	1584.2	1573.1	1570.9	1535.3
45°	1684.3	1699.8	1746.5	1782.0	1788.6	1768.7	1750.9	1735.3	1726.4	1722.0	1690.9
47.5°	1802.0	1817.6	1859.8	1902.0	1933.1	1928.7	1908.6	1893.1	1899.7	1895.3	1875.4
50°	1933.1	1942.0	1968.7	2017.6	2088.7	2104.2	2099.7	2088.7	2102.0	2102.0	2084.2
52.5°	2037.5	2044.2	2064.2	2122.0	2239.8	2275.2	2304.2	2326.4	2348.6	2361.9	2350.8
55°	2133.1	2133.1	2135.3	2208.7	2384.2	2441.9	2506.3	2553.0	2581.9	2635.2	2657.4
57.5°	2288.6	2277.5	2275.2	2353.1	2557.5	2617.4	2710.8	2777.4	2817.4	2926.4	2924.1
60°	2244.1	2248.7	2328.6	2557.5	2913.0	2966.4	3050.7	3121.8	3197.4	3277.4	3284.1
62.5°	1935.3	1946.5	2066.5	2408.6	3139.6	3417.4	3677.3	3875.0	3986.2	4057.3	3959.5
65°	1355.4	1382.0	1544.2	1962.0	2890.8	3319.6	3730.7	4188.4	4539.4	5083.9	5241.6
67.5°	675.5	695.5	722.1	1028.8	2159.8	2761.9	3328.5	3952.9	4419.5	5219.4	5666.0
70°	484.4	493.3	513.3	577.7	966.6	1446.5	2113.1	3006.4	3555.2	4761.6	5392.7
72.5°	375.5	384.4	411.0	502.2	640.0	706.6	839.9	1373.2	2042.0	3288.5	4141.7
75°	291.0	304.4	342.2	453.3	615.5	653.3	659.9	708.8	808.7	1459.9	2321.9
77.5°	204.4	206.6	244.4	391.1	597.7	671.1	659.9	659.9	673.2	744.4	993.2
80°	135.5	137.8	162.2	271.1	524.4	611.0	675.5	644.4	646.6	657.7	675.5
82.5°	71.1	75.6	95.5	164.4	306.7	413.3	562.1	586.6	577.7	588.8	584.4
85°	19.9	19.9	33.3	62.2	151.1	160.0	248.9	339.9	346.6	393.3	419.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	8.9	19.9	22.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.1	4.1	5.3	6.6	8.0	9.2	10.2	11.3
100°	8.2	8.2	10.2	14.3	22.5	24.6	26.6	28.6	30.7	31.2	31.7
102.5°	28.6	28.6	32.7	38.9	46.0	47.3	48.6	49.9	51.1	51.4	51.7
105°	55.2	55.2	57.3	62.4	67.5	68.5	69.6	70.6	71.6	71.8	72.1
107.5°	79.8	78.8	81.8	85.9	90.0	90.8	91.6	92.3	93.1	93.6	94.1
110°	103.3	104.3	105.4	108.4	112.5	113.0	113.5	114.1	114.6	115.1	115.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
112.5°	126.8	126.8	128.9	132.0	135.0	135.5	136.1	136.6	137.1	137.6	138.1
115°	149.4	150.4	152.4	154.5	157.5	158.0	158.6	159.1	159.6	160.1	160.6
117.5°	172.9	173.9	175.9	178.0	181.1	181.6	182.1	182.6	183.1	183.3	183.6
120°	197.4	199.5	200.5	202.5	205.6	205.8	206.1	206.4	206.6	207.1	207.7
122.5°	224.0	225.0	226.1	228.1	231.2	231.4	231.7	232.0	232.2	232.4	232.7
125°	249.6	251.6	252.7	253.7	256.8	257.0	257.3	257.6	257.8	258.0	258.3
127.5°	273.1	275.2	276.2	278.2	280.3	280.8	281.3	281.8	282.3	282.8	283.4
130°	296.7	298.7	299.7	300.7	304.8	305.0	305.4	305.7	305.9	306.4	306.9
132.5°	320.2	321.2	324.3	325.3	328.4	328.6	328.9	329.2	329.4	330.2	330.9
135°	343.7	344.7	346.8	348.8	352.9	352.9	352.9	352.9	352.9	353.7	354.5
137.5°	367.2	368.3	371.3	372.4	375.4	375.4	375.4	375.4	375.4	375.9	376.4
140°	390.8	391.8	393.8	394.9	396.9	397.1	397.4	397.7	397.9	398.1	398.4
142.5°	413.3	415.3	417.4	416.3	419.4	419.4	419.4	419.4	419.4	419.9	420.4
145°	434.8	435.8	437.8	437.8	440.9	441.1	441.4	441.7	441.9	442.4	442.9
147.5°	454.2	454.2	457.3	458.3	462.4	462.6	462.9	463.2	463.4	463.6	463.9
150°	471.6	472.6	474.6	475.7	479.8	480.0	480.3	480.6	480.8	481.0	481.3
152.5°	490.0	491.0	494.1	493.1	496.1	496.3	496.6	496.9	497.2	497.4	497.7
155°	510.5	511.5	513.5	512.5	514.5	514.5	514.5	514.5	514.5	514.7	515.1
157.5°	524.8	526.8	528.9	527.8	530.9	530.9	530.9	530.9	530.9	530.9	530.9
160°	537.0	539.1	541.1	541.1	544.2	544.2	544.2	544.2	544.2	544.2	544.2
162.5°	547.3	548.3	551.4	550.3	553.4	553.4	553.4	553.4	553.4	553.6	553.9
165°	558.5	559.6	561.6	560.6	564.7	564.7	564.7	564.7	564.7	564.9	565.2
167.5°	567.7	568.8	571.8	570.8	573.9	573.7	573.4	573.1	572.9	572.9	572.9
170°	574.9	575.9	579.0	578.0	580.0	579.8	579.5	579.2	579.0	578.8	578.5
172.5°	578.0	579.0	582.1	580.0	582.1	581.9	581.5	581.2	581.0	581.2	581.5
175°	580.0	582.1	583.1	582.1	585.1	585.1	585.1	585.1	585.1	585.3	585.6
177.5°	585.1	586.2	588.2	587.2	591.3	591.1	590.8	590.4	590.2	590.2	590.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2





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**CANDELA DISTRIBUTION (continued):**

	52.5°	55°	57.5°	59°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6
2.5°	1710.9	1702.0	1699.8	1695.3	1697.6	1690.9	1688.7	1679.8	1679.8	1675.4	1670.9
5°	1722.0	1713.1	1722.0	1706.5	1708.6	1702.0	1690.9	1690.9	1682.0	1675.4	1662.0
7.5°	1690.9	1690.9	1693.1	1684.3	1686.4	1684.3	1670.9	1668.6	1655.3	1655.3	1639.8
10°	1633.1	1633.1	1642.0	1635.4	1637.5	1635.4	1628.7	1626.5	1622.0	1622.0	1597.5
12.5°	1566.4	1579.8	1593.1	1586.5	1586.5	1590.9	1590.9	1593.1	1590.9	1588.7	1568.7
15°	1510.9	1530.9	1544.2	1542.0	1544.2	1555.4	1559.8	1562.0	1568.7	1566.4	1548.7
17.5°	1459.9	1482.1	1493.2	1502.0	1508.8	1517.5	1530.9	1537.6	1546.5	1544.2	1526.4
20°	1413.2	1433.2	1453.2	1464.3	1466.5	1484.3	1499.9	1519.8	1524.3	1528.7	1506.5
22.5°	1364.3	1382.0	1422.0	1415.4	1430.9	1464.3	1473.2	1502.0	1502.0	1517.5	1486.4
25°	1322.1	1324.3	1386.5	1375.4	1388.8	1448.7	1455.4	1506.5	1493.2	1515.4	1479.8
27.5°	1279.8	1277.7	1353.2	1339.9	1355.4	1437.7	1442.1	1513.1	1499.9	1526.4	1479.8
30°	1248.7	1242.1	1328.7	1302.1	1324.3	1426.5	1428.8	1519.8	1508.8	1544.2	1495.3
32.5°	1242.1	1230.9	1306.5	1286.5	1308.8	1415.4	1428.8	1544.2	1530.9	1575.3	1513.1
35°	1270.9	1253.2	1317.7	1299.9	1317.7	1419.9	1439.8	1582.0	1566.4	1617.6	1555.4
37.5°	1324.3	1310.9	1364.3	1346.5	1359.8	1451.0	1468.8	1630.9	1628.7	1690.9	1619.8
40°	1417.6	1404.3	1446.5	1422.0	1433.2	1517.5	1526.4	1699.8	1706.5	1782.0	1710.9
42.5°	1544.2	1522.0	1555.4	1526.4	1542.0	1617.6	1608.7	1784.2	1804.2	1908.6	1826.5
45°	1706.5	1677.5	1697.6	1666.5	1677.5	1742.0	1717.5	1897.6	1917.5	2046.4	1973.1
47.5°	1884.2	1848.7	1873.1	1833.1	1839.8	1908.6	1864.2	2033.1	2064.2	2226.4	2155.3
50°	2097.6	2050.9	2059.7	2022.0	2026.5	2095.3	2046.4	2199.8	2237.5	2417.4	2355.2
52.5°	2370.8	2304.2	2304.2	2253.0	2255.3	2324.1	2264.2	2397.5	2439.7	2621.9	2579.7
55°	2730.8	2677.5	2666.3	2613.0	2595.2	2608.5	2524.1	2617.4	2664.2	2835.2	2801.9
57.5°	3017.4	3010.7	3044.1	2968.5	2950.8	2955.2	2848.5	2855.3	2908.6	3041.8	3053.0
60°	3366.2	3377.4	3381.8	3319.6	3312.9	3250.7	3141.9	3124.1	3190.7	3281.8	3317.4
62.5°	3921.8	3910.6	3855.1	3808.4	3766.2	3599.6	3539.6	3441.8	3535.1	3586.3	3659.6
65°	5115.0	4999.4	4643.9	4675.0	4563.9	4201.7	4150.6	3952.9	4099.5	4101.7	4239.5
67.5°	6297.0	6523.7	6305.9	6310.4	6059.2	5403.8	5246.0	4852.8	4934.9	4839.4	4910.5
70°	6499.2	6816.9	7412.4	7305.8	7292.4	6788.1	6257.0	5601.6	5354.9	5150.5	4986.1
72.5°	5592.7	5910.4	6783.6	6541.5	6632.5	6785.8	6232.6	5741.5	5190.5	4930.5	4575.0
75°	3935.1	4392.8	5279.3	5152.7	5219.4	5472.7	4997.2	4939.4	4301.7	4128.4	3581.8
77.5°	2108.6	2675.2	3668.4	3512.9	3541.8	3686.2	3190.7	3088.5	2473.1	2301.9	1682.0
80°	948.8	1315.4	2059.7	1886.4	1835.4	1753.1	1291.0	1017.6	622.2	413.3	286.6
82.5°	628.8	653.3	913.2	791.0	739.9	611.0	395.5	233.3	184.4	155.5	148.8
85°	422.2	386.6	384.4	339.9	315.5	248.9	184.4	115.5	95.5	80.0	73.3
87.5°	24.4	15.5	22.2	24.4	17.8	15.5	11.2	0.0	2.3	0.0	2.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	12.3	13.3	11.8	10.8	10.2	8.7	7.2	6.6	6.1	5.6	5.1
100°	32.2	32.7	32.2	31.9	31.7	31.2	30.7	29.9	29.2	28.4	27.6
102.5°	52.0	52.2	52.0	51.8	51.7	51.4	51.1	50.6	50.1	49.6	49.1
105°	72.4	72.6	72.6	72.6	72.6	72.6	72.6	72.1	71.6	71.1	70.6
107.5°	94.6	95.1	94.9	94.7	94.6	94.3	94.1	93.9	93.6	93.3	93.1
110°	116.1	116.6	116.6	116.6	116.6	116.6	116.6	116.4	116.1	115.8	115.6



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**CANDELA DISTRIBUTION (continued):**

	52.5°	55°	57.5°	59°	60°	62.5°	65°	67.5°	70°	72.5°	75°
112.5°	138.6	139.1	139.1	139.1	139.1	139.1	139.1	138.9	138.6	138.3	138.1
115°	161.1	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6
117.5°	183.9	184.1	184.3	184.5	184.6	184.9	185.2	184.9	184.6	184.3	184.1
120°	208.2	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7
122.5°	233.0	233.2	233.2	233.2	233.2	233.2	233.2	233.4	233.7	234.1	234.3
125°	258.6	258.8	259.0	259.2	259.3	259.6	259.8	259.8	259.8	259.8	259.8
127.5°	283.9	284.4	284.2	284.0	283.9	283.6	283.4	283.6	283.9	284.2	284.4
130°	307.4	307.9	307.9	307.9	307.9	307.9	307.9	308.1	308.4	308.7	308.9
132.5°	331.6	332.5	332.5	332.5	332.5	332.5	332.5	332.7	333.0	333.3	333.5
135°	355.2	356.0	356.0	356.0	356.0	356.0	356.0	356.2	356.5	356.8	357.0
137.5°	377.0	377.5	377.5	377.5	377.5	377.5	377.5	377.7	378.0	378.3	378.5
140°	398.7	399.0	399.0	399.0	399.0	399.0	399.0	399.5	400.0	400.5	401.0
142.5°	420.9	421.5	421.5	421.5	421.5	421.5	421.5	421.7	422.0	422.3	422.5
145°	443.4	444.0	443.8	443.6	443.4	443.1	442.9	443.1	443.4	443.8	444.0
147.5°	464.2	464.4	463.9	463.6	463.4	462.9	462.4	462.6	462.9	463.2	463.4
150°	481.6	481.8	481.3	481.0	480.8	480.3	479.8	479.8	479.8	479.8	479.8
152.5°	498.0	498.2	498.0	497.8	497.7	497.4	497.2	497.2	497.2	497.2	497.2
155°	515.4	515.6	515.4	515.2	515.1	514.7	514.5	514.7	515.1	515.4	515.6
157.5°	530.9	530.9	530.4	530.1	529.9	529.4	528.9	529.1	529.4	529.7	529.9
160°	544.2	544.2	543.7	543.4	543.2	542.7	542.2	542.2	542.2	542.2	542.2
162.5°	554.2	554.4	553.9	553.6	553.4	552.9	552.4	551.9	551.4	550.9	550.3
165°	565.5	565.7	564.9	564.5	564.2	563.4	562.6	562.1	561.6	561.1	560.6
167.5°	572.9	572.9	572.3	572.0	571.8	571.3	570.8	571.0	571.3	571.6	571.8
170°	578.2	578.0	577.8	577.6	577.5	577.1	576.9	577.5	578.0	578.5	579.0
172.5°	581.9	582.1	581.5	581.2	581.0	580.5	580.0	580.2	580.5	580.8	581.0
175°	585.9	586.2	585.3	584.9	584.6	583.9	583.1	582.6	582.1	581.5	581.0
177.5°	590.2	590.2	589.4	589.0	588.7	588.0	587.2	587.2	587.2	587.2	587.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2



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**CANDELA DISTRIBUTION (continued):**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6
2.5°	1659.8	1659.8	1657.6	1642.0	1633.1	1628.7	1613.1	1610.9	1604.3	1602.0	1602.0
5°	1657.6	1648.7	1637.5	1615.3	1593.1	1573.1	1566.4	1550.9	1539.8	1526.4	1526.4
7.5°	1626.5	1617.6	1593.1	1559.8	1530.9	1502.0	1486.4	1464.3	1446.5	1428.8	1424.3
10°	1590.9	1577.6	1544.2	1499.9	1462.0	1411.0	1390.9	1362.1	1342.1	1315.4	1288.7
12.5°	1553.1	1544.2	1504.2	1453.2	1395.4	1331.0	1299.9	1259.9	1233.2	1202.1	1162.1
15°	1537.6	1519.8	1468.8	1404.3	1333.2	1255.4	1211.0	1168.7	1128.7	1093.2	1039.8
17.5°	1517.5	1495.3	1437.7	1362.1	1273.2	1179.9	1122.1	1075.4	1022.1	984.3	924.3
20°	1495.3	1462.0	1399.8	1308.8	1208.7	1097.6	1024.3	977.6	906.5	868.8	797.7
22.5°	1477.6	1435.4	1359.8	1257.6	1137.6	1013.2	926.6	873.2	793.2	748.8	659.9
25°	1473.2	1422.0	1331.0	1215.4	1077.7	931.0	826.5	773.2	673.2	622.2	517.7
27.5°	1475.4	1415.4	1313.2	1179.9	1024.3	857.6	733.3	671.1	544.4	491.0	371.0
30°	1477.6	1417.6	1295.4	1148.8	975.5	782.1	635.5	562.1	411.0	364.4	257.8
32.5°	1499.9	1426.5	1291.0	1124.3	931.0	706.6	524.4	457.8	291.0	264.4	191.1
35°	1526.4	1455.4	1299.9	1119.8	897.6	631.1	411.0	342.2	208.9	202.2	155.5
37.5°	1582.0	1499.9	1335.4	1131.0	877.7	553.3	306.7	262.2	164.4	168.9	135.5
40°	1666.5	1575.3	1393.2	1164.3	875.4	475.5	226.7	204.4	142.2	146.7	124.4
42.5°	1779.8	1679.8	1482.1	1235.4	886.6	402.2	182.2	175.5	131.1	135.5	120.0
45°	1928.7	1826.5	1606.4	1326.5	917.7	342.2	160.0	160.0	126.6	131.1	117.7
47.5°	2117.5	2004.2	1759.8	1448.7	966.6	308.8	151.1	153.3	124.4	131.1	117.7
50°	2330.8	2206.4	1955.4	1606.4	1042.1	299.9	153.3	153.3	126.6	131.1	117.7
52.5°	2553.0	2437.5	2166.4	1786.5	1146.5	320.0	157.7	155.5	126.6	131.1	115.5
55°	2779.7	2675.2	2399.7	1997.5	1291.0	391.1	168.9	162.2	126.6	131.1	117.7
57.5°	3006.4	2933.0	2644.1	2224.2	1470.9	520.0	213.3	188.8	139.9	142.2	120.0
60°	3261.8	3208.5	2919.6	2521.9	1726.4	720.0	313.3	237.7	166.6	157.7	128.9
62.5°	3592.9	3579.6	3350.7	2950.8	2137.6	1008.7	444.4	288.9	179.9	164.4	137.8
65°	4177.3	4212.8	3995.0	3452.9	2410.8	1015.5	433.3	253.3	168.9	155.5	135.5
67.5°	4763.9	4659.4	4099.5	3377.4	2175.3	675.5	275.5	197.7	148.8	144.4	126.6
70°	4741.7	4457.2	3717.3	2953.0	1717.5	366.6	200.0	164.4	133.3	133.3	120.0
72.5°	4252.8	3830.6	3039.6	2337.5	1146.5	233.3	168.9	144.4	122.2	120.0	111.1
75°	3201.8	2704.2	1953.1	1346.5	511.1	151.1	128.9	117.7	106.7	106.7	97.8
77.5°	1506.5	848.7	471.1	313.3	171.1	102.2	88.9	88.9	86.6	88.9	80.0
80°	204.4	184.4	157.7	137.8	104.4	71.1	64.4	66.7	64.4	66.7	59.9
82.5°	124.4	111.1	91.1	86.6	64.4	48.9	46.6	48.9	44.4	46.6	35.6
85°	59.9	53.3	42.2	40.0	33.3	28.8	24.4	28.8	22.2	24.4	15.5
87.5°	0.0	4.4	2.3	4.4	4.4	4.4	0.0	4.4	0.0	4.4	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
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°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	4.9	4.6	4.1	4.1	4.1	4.6	4.9	5.1	5.6	6.1	6.6
100°	27.4	27.1	26.6	25.6	26.6	27.1	27.4	27.6	28.4	29.2	29.9
102.5°	49.3	49.6	50.1	49.1	50.1	49.6	49.3	49.1	49.6	50.1	50.6
105°	71.1	71.6	72.6	70.6	72.6	71.6	71.1	70.6	71.1	71.6	72.1
107.5°	93.3	93.6	94.1	93.1	94.1	93.6	93.3	93.1	93.3	93.6	93.9
110°	115.8	116.1	116.6	115.6	116.6	116.1	115.8	115.6	115.8	116.1	116.4



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REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°	
112.5°	138.6	139.1	140.1	138.1	140.1	139.1	138.6	138.1	138.3	138.6	138.9	0°
115°	162.1	162.6	163.7	162.6	163.7	162.6	162.1	161.6	161.6	161.6	161.6	2.5°
117.5°	184.6	185.2	186.2	184.1	186.2	185.2	184.6	184.1	184.3	184.6	184.9	5°
120°	209.2	209.7	210.7	208.7	210.7	209.7	209.2	208.7	208.7	208.7	208.7	7.5°
122.5°	235.3	236.3	238.3	237.3	238.3	236.3	235.3	234.3	234.1	233.7	233.4	10°
125°	260.6	261.4	262.9	261.9	262.9	261.4	260.6	259.8	259.8	259.8	259.8	12.5°
127.5°	285.2	285.9	287.4	284.4	287.4	285.9	285.2	284.4	284.2	283.9	283.6	15°
130°	309.7	310.5	312.0	310.0	312.0	310.5	309.7	308.9	308.7	308.4	308.1	17.5°
132.5°	334.3	335.0	336.6	334.5	336.6	335.0	334.3	333.5	333.3	333.0	332.7	20°
135°	357.5	358.0	359.1	358.0	359.1	358.0	357.5	357.0	356.8	356.5	356.2	22.5°
137.5°	379.5	380.5	382.6	380.5	382.6	380.5	379.5	378.5	378.3	378.0	377.7	25°
140°	402.0	403.0	405.1	403.0	405.1	403.0	402.0	401.0	400.5	400.0	399.5	27.5°
142.5°	423.3	424.0	425.5	424.5	425.5	424.0	423.3	422.5	422.3	422.0	421.7	30°
145°	444.8	445.5	447.0	445.0	447.0	445.5	444.8	444.0	443.8	443.4	443.1	32.5°
147.5°	464.2	464.9	466.5	463.4	466.5	464.9	464.2	463.4	463.2	462.9	462.6	35°
150°	480.8	481.8	483.9	480.8	483.9	481.8	480.8	479.8	479.8	479.8	479.8	37.5°
152.5°	498.0	498.7	500.2	497.2	500.2	498.7	498.0	497.2	497.2	497.2	497.2	40°
155°	516.4	517.1	518.6	516.6	518.6	517.1	516.4	515.6	515.4	515.1	514.7	42.5°
157.5°	531.1	532.4	535.0	531.9	535.0	532.4	531.1	529.9	529.7	529.4	529.1	45°
160°	543.0	543.7	545.2	543.2	545.2	543.7	543.0	542.2	542.2	542.2	542.2	47.5°
162.5°	550.9	551.4	552.4	549.3	552.4	551.4	550.9	550.3	550.9	551.4	551.9	50°
165°	561.1	561.6	562.6	560.6	562.6	561.6	561.1	560.6	561.1	561.6	562.1	52.5°
167.5°	572.9	573.9	575.9	573.9	575.9	573.9	572.9	571.8	571.6	571.3	571.0	55°
170°	580.2	581.5	584.1	582.1	584.1	581.5	580.2	579.0	578.5	578.0	577.5	57.5°
172.5°	581.9	582.6	584.1	581.0	584.1	582.6	581.9	581.0	580.8	580.5	580.2	60°
175°	581.9	582.6	584.1	581.0	584.1	582.6	581.9	581.0	581.5	582.1	582.6	62.5°
177.5°	588.0	588.7	590.2	587.2	590.2	588.7	588.0	587.2	587.2	587.2	587.2	65°
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°
												110°

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 CATALOG NUMBER:

**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°	115°	115°
1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	1657.6	112.5°	139.1
1590.9	1584.2	1582.0	1573.1	1570.9	1562.0	1559.8	1550.9	1535.3	1528.7	1517.5	115°	161.6
1506.5	1495.3	1486.4	1482.1	1464.3	1455.4	1442.1	1424.3	1390.9	1375.4	1348.8	117.5°	185.2
1388.8	1386.5	1359.8	1350.9	1328.7	1313.2	1293.2	1264.3	1215.4	1186.5	1144.3	120°	208.7
1259.9	1251.0	1219.9	1202.1	1173.2	1150.9	1124.3	1082.1	1006.6	946.5	882.1	122.5°	233.2
1139.9	1113.2	1077.7	1051.0	1015.5	984.3	953.2	888.7	768.7	671.1	582.2	125°	259.8
1015.5	975.5	937.6	893.2	855.5	806.6	771.0	686.6	528.9	408.9	353.3	127.5°	283.4
888.7	833.2	791.0	731.0	688.9	622.2	584.4	482.1	346.6	293.3	275.5	130°	307.9
755.4	682.1	635.5	562.1	520.0	435.5	406.6	333.3	266.7	246.6	242.2	132.5°	332.5
613.3	524.4	473.3	393.3	364.4	313.3	291.0	255.5	224.4	215.5	219.9	135°	356.0
464.4	368.9	335.5	277.7	266.7	240.0	231.1	213.3	197.7	197.7	204.4	137.5°	377.5
331.0	257.8	248.9	213.3	211.0	197.7	191.1	182.2	177.8	182.2	191.1	140°	399.0
242.2	195.5	195.5	175.5	175.5	166.6	164.4	160.0	160.0	168.9	177.8	142.5°	421.5
191.1	160.0	164.4	148.8	151.1	144.4	146.7	144.4	146.7	153.3	160.0	145°	442.9
160.0	137.8	144.4	131.1	135.5	128.9	133.3	133.3	137.8	139.9	142.2	147.5°	462.4
142.2	126.6	131.1	122.2	126.6	120.0	126.6	126.6	128.9	128.9	128.9	150°	479.8
131.1	117.7	124.4	115.5	122.2	115.5	122.2	122.2	120.0	117.7	120.0	152.5°	497.2
124.4	115.5	122.2	113.3	120.0	113.3	117.7	115.5	111.1	111.1	111.1	155°	514.5
122.2	113.3	117.7	111.1	115.5	108.8	113.3	111.1	104.4	102.2	106.7	157.5°	528.9
122.2	111.1	117.7	108.8	113.3	106.7	111.1	104.4	97.8	97.8	104.4	160°	542.2
122.2	111.1	117.7	108.8	113.3	104.4	106.7	99.9	91.1	93.3	102.2	162.5°	552.4
124.4	115.5	120.0	111.1	113.3	99.9	104.4	95.5	88.9	91.1	97.8	165°	562.6
126.6	115.5	120.0	106.7	108.8	99.9	99.9	95.5	88.9	88.9	95.5	167.5°	570.8
126.6	113.3	115.5	104.4	106.7	95.5	97.8	93.3	86.6	84.4	88.9	170°	576.9
131.1	117.7	117.7	102.2	104.4	93.3	95.5	91.1	84.4	80.0	82.2	172.5°	580.0
135.5	120.0	122.2	106.7	106.7	95.5	97.8	88.9	80.0	75.6	77.7	175°	583.1
135.5	120.0	122.2	108.8	108.8	97.8	97.8	88.9	75.6	71.1	71.1	177.5°	587.2
128.9	117.7	120.0	108.8	108.8	97.8	97.8	86.6	73.3	66.7	64.4	180°	589.2
124.4	113.3	115.5	102.2	104.4	93.3	93.3	82.2	68.8	62.2	57.8		
113.3	104.4	104.4	95.5	93.3	82.2	82.2	75.6	64.4	55.5	51.1		
97.8	88.9	86.6	77.7	77.7	71.1	68.8	62.2	53.3	46.6	44.4		
80.0	68.8	68.8	57.8	57.8	51.1	53.3	46.6	40.0	37.7	35.6		
57.8	46.6	46.6	37.7	37.7	31.1	33.3	31.1	28.8	28.8	26.7		
35.6	24.4	26.7	19.9	24.4	17.8	19.9	17.8	17.8	15.5	15.5		
17.8	8.9	13.3	6.6	11.2	2.3	6.6	4.4	4.4	4.4	4.4		
2.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
7.2	8.7	10.2	11.8	13.3	12.3	11.3	9.2	4.1	3.1	2.0		
30.7	31.2	31.7	32.2	32.7	32.2	31.7	30.7	22.5	14.3	10.2		
51.1	51.4	51.7	52.0	52.2	52.0	51.7	51.1	46.0	38.9	32.7		
72.6	72.6	72.6	72.6	72.6	72.4	72.1	71.6	67.5	62.4	57.3		
94.1	94.3	94.6	94.9	95.1	94.6	94.1	93.1	90.0	85.9	81.8		
116.6	116.6	116.6	116.6	116.6	116.1	115.6	114.6	112.5	108.4	105.4		

'228200  
 ISS-AF-1200-LED-E1-SL3-ULG

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**TION (continued):**

**CANDELA DISTRIBUTION (con**

117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°		175°	180°
139.1	139.1	139.1	139.1	138.6	138.1	137.1	135.0	132.0	128.9	0°	1657.6	1657.6
161.6	161.6	161.6	161.6	161.1	160.6	159.6	157.5	154.5	152.4	2.5°	1506.5	1513.1
184.9	184.6	184.3	184.1	183.9	183.6	183.1	181.1	178.0	175.9	5°	1339.9	1342.1
208.7	208.7	208.7	208.7	208.2	207.7	206.6	205.6	202.5	200.5	7.5°	1137.6	1133.2
233.2	233.2	233.2	233.2	233.0	232.7	232.2	231.2	228.1	226.1	10°	868.8	857.6
259.6	259.3	259.0	258.8	258.6	258.3	257.8	256.8	253.7	252.7	12.5°	560.0	544.4
283.6	283.9	284.2	284.4	283.9	283.4	282.3	280.3	278.2	276.2	15°	337.8	333.3
307.9	307.9	307.9	307.9	307.4	306.9	305.9	304.8	300.7	299.7	17.5°	271.1	271.1
332.5	332.5	332.5	332.5	331.6	330.9	329.4	328.4	325.3	324.3	20°	242.2	242.2
356.0	356.0	356.0	356.0	355.2	354.5	352.9	352.9	348.8	346.8	22.5°	224.4	224.4
377.5	377.5	377.5	377.5	377.0	376.4	375.4	375.4	372.4	371.3	25°	211.0	213.3
399.0	399.0	399.0	399.0	398.7	398.4	397.9	396.9	394.9	393.8	27.5°	200.0	200.0
421.5	421.5	421.5	421.5	420.9	420.4	419.4	419.4	416.3	417.4	30°	186.7	186.7
443.1	443.4	443.8	444.0	443.4	442.9	441.9	440.9	437.8	437.8	32.5°	164.4	164.4
462.9	463.4	463.9	464.4	464.2	463.9	463.4	462.4	458.3	457.3	35°	146.7	144.4
480.3	480.8	481.3	481.8	481.6	481.3	480.8	479.8	475.7	474.6	37.5°	131.1	133.3
497.4	497.7	498.0	498.2	498.0	497.7	497.2	496.1	493.1	494.1	40°	120.0	122.2
514.7	515.1	515.4	515.6	515.4	515.1	514.5	514.5	512.5	513.5	42.5°	115.5	115.5
529.4	529.9	530.4	530.9	530.9	530.9	530.9	530.9	527.8	528.9	45°	111.1	111.1
542.7	543.2	543.7	544.2	544.2	544.2	544.2	544.2	541.1	541.1	47.5°	111.1	111.1
552.9	553.4	553.9	554.4	554.2	553.9	553.4	553.4	550.3	551.4	50°	108.8	111.1
563.4	564.2	564.9	565.7	565.5	565.2	564.7	564.7	560.6	561.6	52.5°	106.7	106.7
571.3	571.8	572.3	572.9	572.9	572.9	572.9	573.9	570.8	571.8	55°	99.9	102.2
577.1	577.5	577.8	578.0	578.2	578.5	579.0	580.0	578.0	579.0	57.5°	93.3	95.5
580.5	581.0	581.5	582.1	581.9	581.5	581.0	582.1	580.0	582.1	60°	86.6	86.6
583.9	584.6	585.3	586.2	585.9	585.6	585.1	585.1	582.1	583.1	62.5°	77.7	77.7
588.0	588.7	589.4	590.2	590.2	590.2	590.2	591.3	587.2	588.2	65°	71.1	71.1
589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	67.5°	62.2	62.2
										70°	55.5	55.5
										72.5°	48.9	48.9
										75°	42.2	42.2
										77.5°	35.6	33.3
										80°	26.7	26.7
										82.5°	15.5	15.5
										85°	4.4	4.4
										87.5°	0.0	0.0
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	1.0	1.0
										97.5°	2.0	2.0
										100°	8.2	8.2
										102.5°	28.6	28.6
										105°	55.2	55.2
										107.5°	78.8	79.8
										110°	104.3	103.3



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**CANDELA DISTRIBUTION (continued):**

	175°	180°
112.5°	126.8	126.8
115°	150.4	149.4
117.5°	173.9	172.9
120°	199.5	197.4
122.5°	225.0	224.0
125°	251.6	249.6
127.5°	275.2	273.1
130°	298.7	296.7
132.5°	321.2	320.2
135°	344.7	343.7
137.5°	368.3	367.2
140°	391.8	390.8
142.5°	415.3	413.3
145°	435.8	434.8
147.5°	454.2	454.2
150°	472.6	471.6
152.5°	491.0	490.0
155°	511.5	510.5
157.5°	526.8	524.8
160°	539.1	537.0
162.5°	548.3	547.3
165°	559.6	558.5
167.5°	568.8	567.7
170°	575.9	574.9
172.5°	579.0	578.0
175°	582.1	580.0
177.5°	586.2	585.1
180°	589.2	589.2

(END OF REPORT)

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report

