

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: INVUE

Report Number: P401649

Luminaire Tested: **ENV-SA1E-735-U-SL3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401649  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1E-735-U-SL3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5537 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.2  
Input Voltage (V): NR  
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

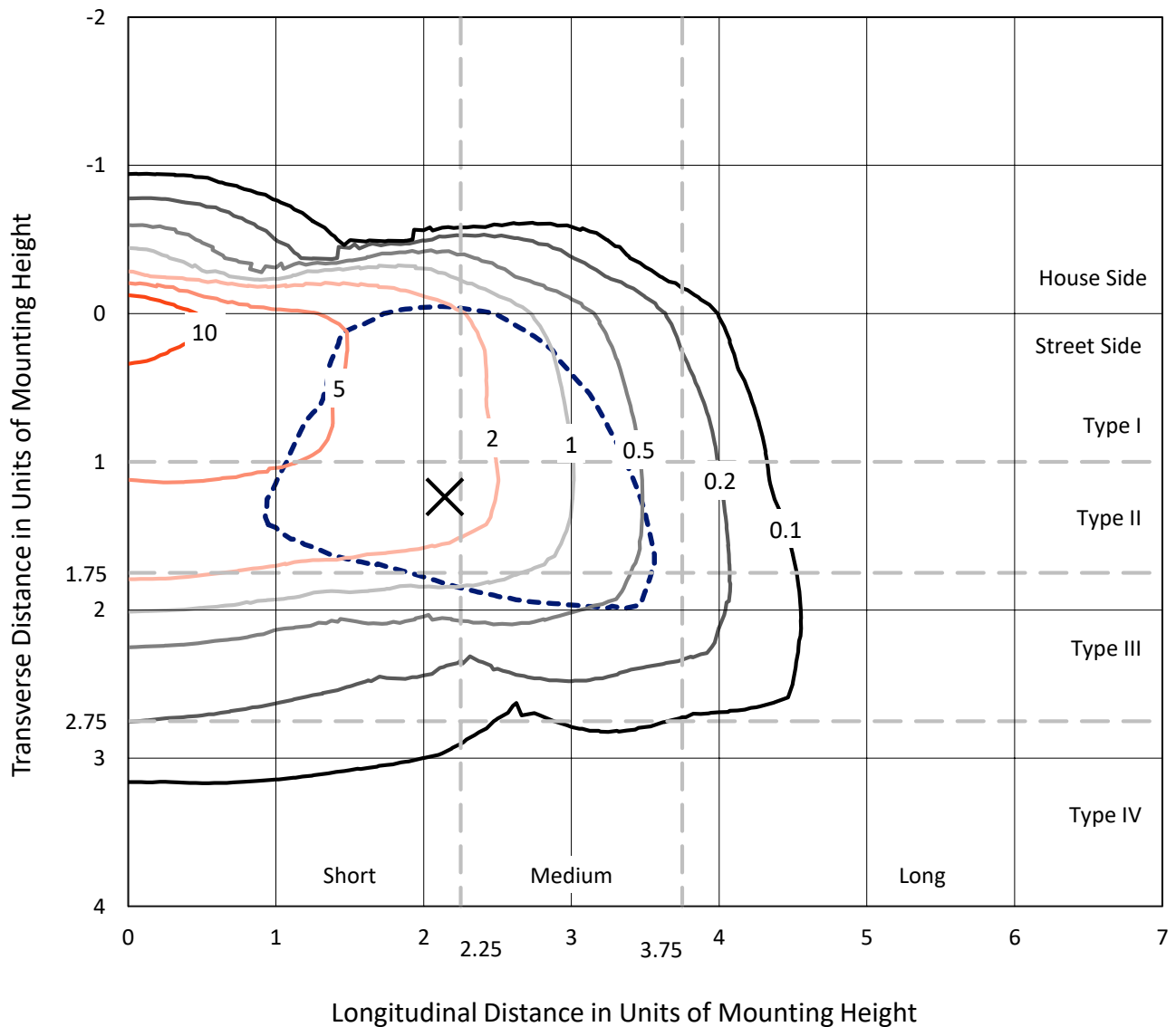


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

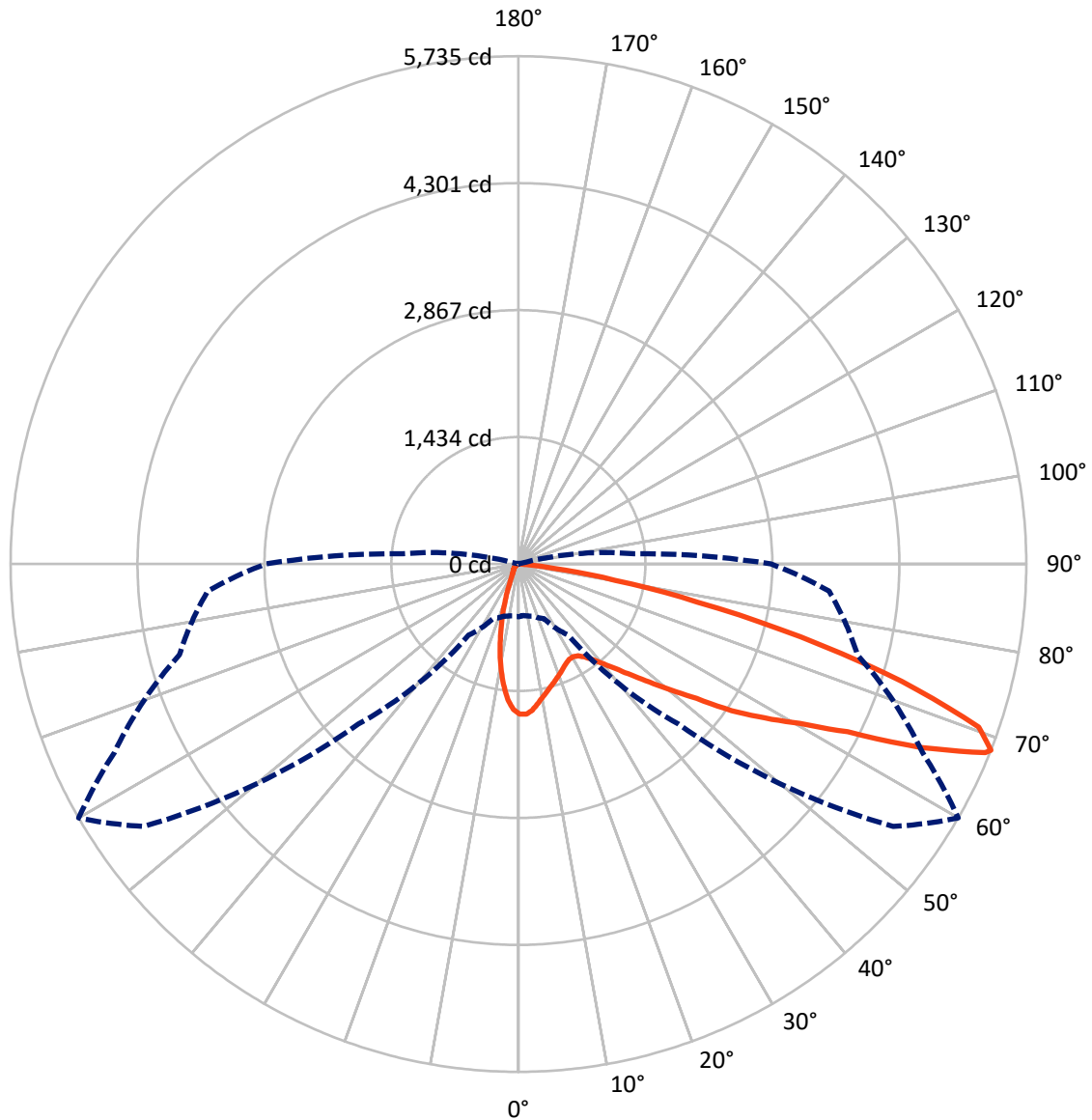


Based on 10 foot mounting height. Maximum calculated value = 16.9 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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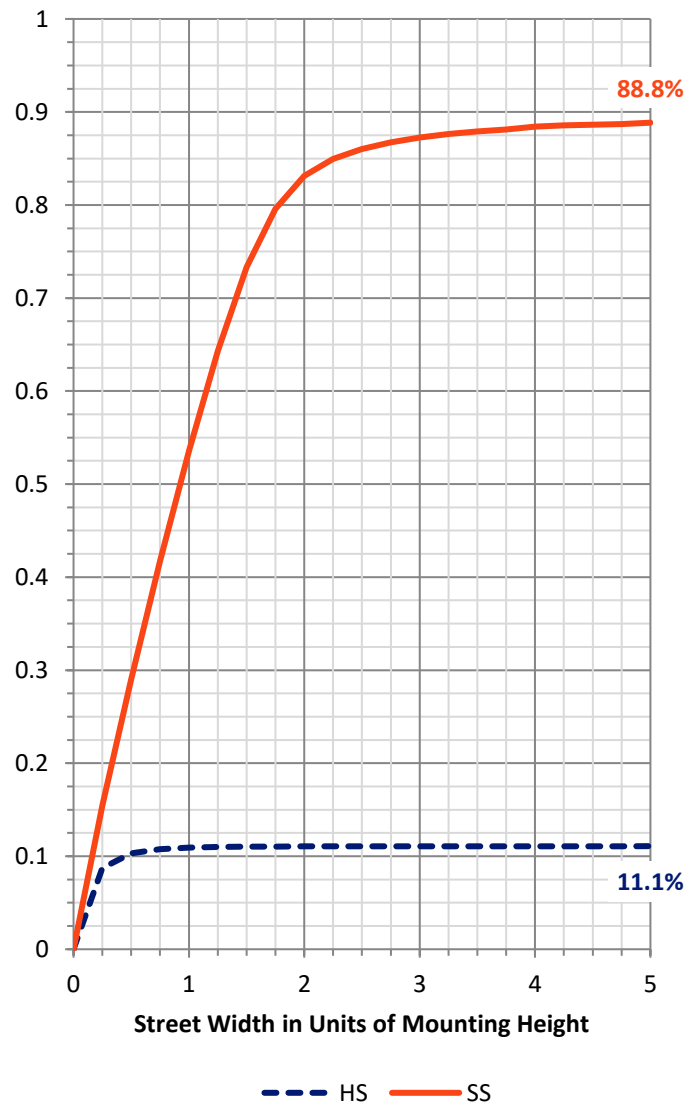
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	619.1	0.0	619.1
	% Fixture	11.2	0.0	11.2
<b>Street Side</b>	Lumens	4917.9	0.0	4917.9
	% Fixture	88.8	0.0	88.8
<b>Total</b>	Lumens	5537.0	0.0	5537.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.5	2.5
10°-20°	280.5	5.1
20°-30°	369.3	6.7
30°-40°	509.7	9.2
40°-50°	772.6	14.0
50°-60°	1246.7	22.5
60°-70°	1480.9	26.7
70°-80°	698.1	12.6
80°-90°	41.7	0.8
90°-100°	0.0	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°	5537.0	100.0
0°-180°	5537.0	100.0



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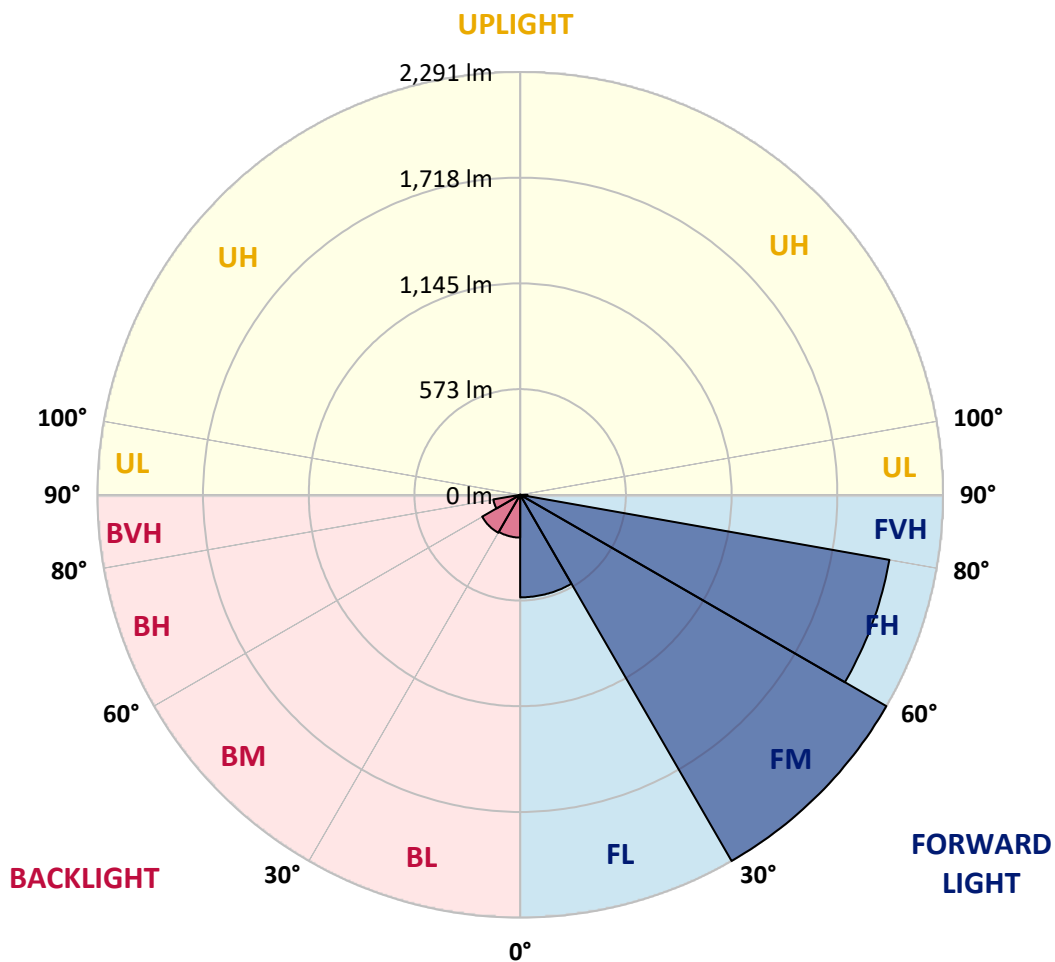
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	555.7	10.0			
FM	(30°-60°)	2291.0	41.4			
FH	(60°-80°)	2031.3	36.7			G2/5000
FVH	(80°-90°)	39.9	0.7			G1/100
BL	(0°-30°)	231.7	4.2	B1/500		
BM	(30°-60°)	238.0	4.3	B1/1000		
BH	(60°-80°)	147.7	2.7	B1/500		G1/500
BVH	(80°-90°)	1.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8
2.5°	1679.8	1676.0	1686.4	1689.2	1692.0	1697.6	1696.7	1697.6	1698.6	1696.7	1685.4
5°	1565.2	1571.7	1581.1	1593.4	1605.6	1633.7	1645.0	1656.3	1663.8	1669.4	1659.1
7.5°	1452.4	1465.6	1473.1	1495.6	1514.4	1543.6	1568.0	1587.7	1606.5	1627.2	1616.8
10°	1362.2	1366.9	1373.5	1394.2	1422.4	1466.5	1498.5	1522.9	1545.4	1580.2	1571.7
12.5°	1273.9	1276.7	1289.9	1312.4	1341.6	1396.1	1438.3	1466.5	1491.9	1535.1	1536.0
15°	1209.1	1210.0	1218.5	1239.2	1273.0	1331.2	1385.7	1416.7	1452.4	1505.0	1507.9
17.5°	1166.8	1165.9	1167.8	1180.9	1212.9	1268.3	1334.1	1370.7	1413.0	1480.6	1483.4
20°	1153.7	1151.8	1148.0	1145.2	1164.9	1212.9	1287.1	1327.5	1377.3	1462.8	1463.7
22.5°	1164.9	1161.2	1152.7	1136.8	1142.4	1173.4	1235.4	1284.3	1345.3	1453.4	1446.8
25°	1192.2	1192.2	1180.9	1155.6	1142.4	1149.0	1198.8	1245.7	1313.4	1448.7	1434.6
27.5°	1237.3	1235.4	1220.4	1194.1	1169.6	1151.8	1176.2	1220.4	1289.9	1454.3	1428.9
30°	1291.8	1286.1	1270.2	1251.4	1221.3	1182.8	1180.9	1213.8	1278.6	1472.2	1432.7
32.5°	1343.4	1343.4	1336.9	1319.0	1289.9	1239.2	1210.0	1236.3	1292.7	1501.3	1444.9
35°	1407.3	1406.4	1408.3	1401.7	1376.3	1322.8	1275.8	1289.0	1335.9	1550.1	1474.0
37.5°	1458.1	1459.0	1475.0	1486.3	1475.0	1418.6	1369.8	1369.8	1409.2	1623.4	1523.8
40°	1507.9	1509.7	1539.8	1572.7	1575.5	1530.4	1483.4	1482.5	1505.0	1713.6	1600.9
42.5°	1553.0	1560.5	1603.7	1660.1	1692.9	1662.9	1628.1	1616.8	1628.1	1849.8	1725.8
45°	1600.9	1615.9	1676.0	1757.8	1811.3	1812.2	1799.1	1785.9	1791.6	2003.0	1893.0
47.5°	1662.9	1679.8	1754.9	1855.5	1956.9	1983.2	1995.4	1990.7	1975.7	2196.5	2109.1
50°	1763.4	1779.4	1849.8	1962.6	2101.6	2196.5	2229.4	2235.0	2215.3	2410.7	2354.3
52.5°	1934.4	1943.8	2009.5	2098.8	2254.7	2432.3	2518.7	2519.7	2475.5	2661.5	2619.3
55°	2117.6	2142.0	2219.0	2322.4	2483.0	2682.2	2898.3	2921.8	2785.5	2881.4	2812.8
57.5°	2120.4	2143.9	2271.7	2469.9	2806.2	3070.2	3262.8	3279.7	3128.5	3058.0	2995.0
60°	1896.8	1909.0	2086.6	2376.9	2921.8	3593.5	3678.0	3652.7	3369.0	3240.3	3223.3
62.5°	1338.8	1344.4	1554.8	1937.2	2666.2	3843.4	4310.3	4174.1	3710.9	3508.9	3565.3
65°	842.7	839.9	927.3	1232.6	1983.2	3597.3	5092.0	4992.4	4339.4	3845.3	3832.1
67.5°	621.9	606.9	630.4	725.3	1133.0	2824.1	5235.7	5684.8	4937.9	3985.3	3601.0
68°	596.6	583.4	607.8	681.1	979.9	2556.3	5166.2	5734.6	5032.8	3962.7	3522.1
70°	506.4	494.2	514.8	570.3	682.1	1659.1	4558.3	5513.8	5119.2	3771.1	3104.0
72.5°	359.8	366.4	420.9	489.5	577.8	851.2	3356.7	4528.3	4403.3	3353.9	2361.8
75°	213.3	225.5	296.9	394.6	530.8	561.8	2165.5	3291.9	3230.9	2322.4	1279.6
77.5°	75.2	79.9	147.5	263.1	437.8	445.3	1206.3	2069.7	1925.0	948.9	377.7
80°	27.2	27.2	54.5	146.6	282.8	340.1	640.7	1104.8	760.0	246.1	104.3
82.5°	4.7	4.7	12.2	49.8	125.0	181.3	297.8	392.7	225.5	54.5	51.7
85°	0.0	0.0	0.0	0.0	1.9	1.9	87.4	88.3	41.3	7.5	22.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.9	1.9	1.9	1.9	1.9	2.8
90°	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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8
2.5°	1680.7	1678.8	1668.5	1649.7	1633.7	1607.4	1602.7	1577.4	1568.0	1560.5	1568.0
5°	1651.6	1641.3	1606.5	1564.2	1506.9	1439.3	1399.8	1345.3	1334.1	1304.0	1321.8
7.5°	1603.7	1580.2	1515.4	1424.2	1319.0	1215.7	1136.8	1060.7	995.8	973.3	966.7
10°	1553.0	1520.1	1411.1	1270.2	1118.0	959.2	841.8	731.9	670.8	613.5	611.6
12.5°	1505.0	1455.2	1297.4	1101.1	888.7	699.9	547.7	432.2	359.8	320.4	330.7
15°	1466.5	1399.8	1182.8	932.0	663.3	450.9	310.0	235.8	210.4	198.2	200.1
17.5°	1428.9	1340.6	1071.9	755.3	472.6	278.1	201.0	175.7	168.2	165.3	163.5
20°	1395.1	1283.3	955.4	595.6	311.9	192.6	165.3	156.9	154.1	152.2	152.2
22.5°	1361.3	1223.2	839.0	441.6	213.3	157.8	148.4	144.7	142.8	140.0	140.0
25°	1330.3	1164.9	722.5	309.1	163.5	140.9	134.3	130.6	126.8	124.0	124.0
27.5°	1306.8	1120.8	614.4	218.9	137.2	126.8	120.3	113.7	109.0	105.2	105.2
30°	1291.8	1077.6	510.1	165.3	122.1	112.7	104.3	95.8	88.3	83.6	82.7
32.5°	1283.3	1041.9	413.4	135.3	109.0	98.6	88.3	78.9	70.5	64.8	64.8
35°	1287.1	1013.7	316.6	114.6	98.6	86.4	75.2	63.9	56.4	51.7	50.7
37.5°	1311.5	997.7	235.8	101.5	88.3	75.2	63.9	52.6	45.1	41.3	40.4
40°	1357.5	1001.5	179.4	92.1	80.8	65.8	52.6	43.2	36.6	32.9	32.9
42.5°	1450.6	1028.7	141.9	84.6	72.3	56.4	44.2	35.7	30.1	27.2	26.3
45°	1573.6	1080.4	116.5	78.0	63.9	47.9	37.6	30.1	24.4	21.6	21.6
47.5°	1759.6	1163.1	100.5	71.4	55.4	40.4	31.0	24.4	18.8	16.9	16.0
50°	1974.8	1278.6	88.3	63.9	48.9	33.8	26.3	18.8	15.0	12.2	12.2
52.5°	2194.6	1407.3	79.9	57.3	42.3	29.1	20.7	14.1	10.3	8.5	8.5
55°	2396.6	1515.4	71.4	51.7	35.7	24.4	16.9	11.3	7.5	5.6	5.6
57.5°	2592.0	1614.0	62.0	45.1	29.1	19.7	13.2	8.5	5.6	3.8	3.8
60°	2837.2	1741.8	53.6	38.5	23.5	16.0	10.3	6.6	3.8	2.8	1.9
62.5°	3133.2	1834.8	45.1	31.0	18.8	12.2	7.5	4.7	2.8	0.9	0.9
65°	3242.1	1711.7	37.6	25.4	15.0	9.4	5.6	3.8	1.9	0.9	0.9
67.5°	2937.7	1379.2	30.1	19.7	11.3	6.6	4.7	2.8	1.9	0.9	0.9
68°	2853.2	1311.5	29.1	18.8	10.3	6.6	3.8	2.8	0.9	0.9	0.0
70°	2408.8	1053.2	23.5	14.1	8.5	5.6	3.8	1.9	0.9	0.9	0.0
72.5°	1785.9	726.2	16.9	9.4	5.6	3.8	2.8	1.9	0.9	0.9	0.0
75°	942.3	282.8	13.2	7.5	4.7	3.8	2.8	2.8	1.9	0.9	0.9
77.5°	270.6	89.3	10.3	5.6	4.7	4.7	4.7	3.8	3.8	2.8	1.9
80°	78.9	29.1	6.6	3.8	4.7	4.7	5.6	4.7	4.7	3.8	3.8
82.5°	42.3	11.3	3.8	2.8	2.8	3.8	4.7	3.8	2.8	1.9	0.9
85°	17.9	3.8	2.8	1.9	1.9	1.9	1.9	1.9	1.9	0.9	0.9
87.5°	0.9	1.9	1.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
90°	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)