

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: P401674

Luminaire Tested: **ENT-SA1E-740-U-SL4-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401674  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1E-740-U-SL4-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5772 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - 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

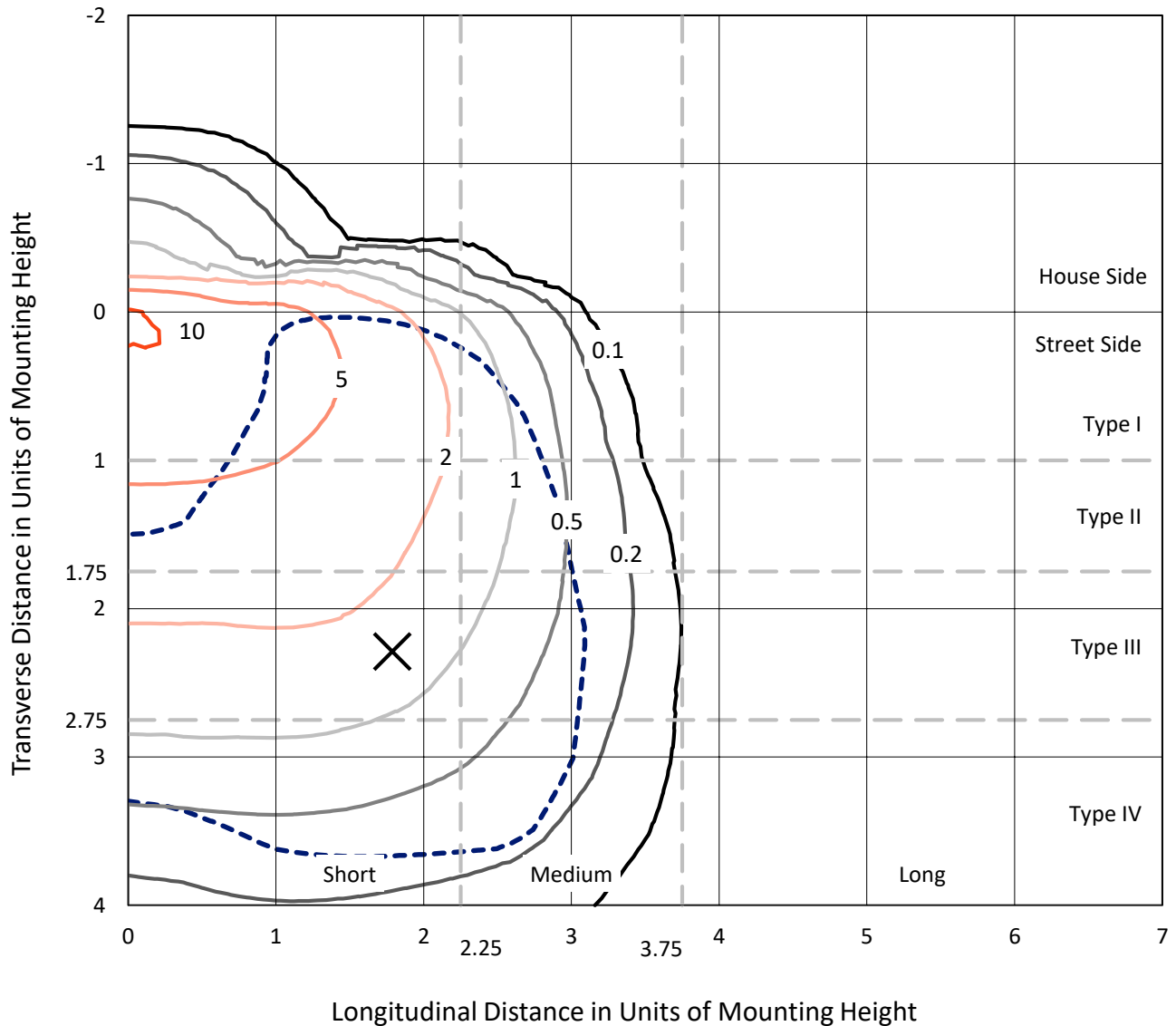


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

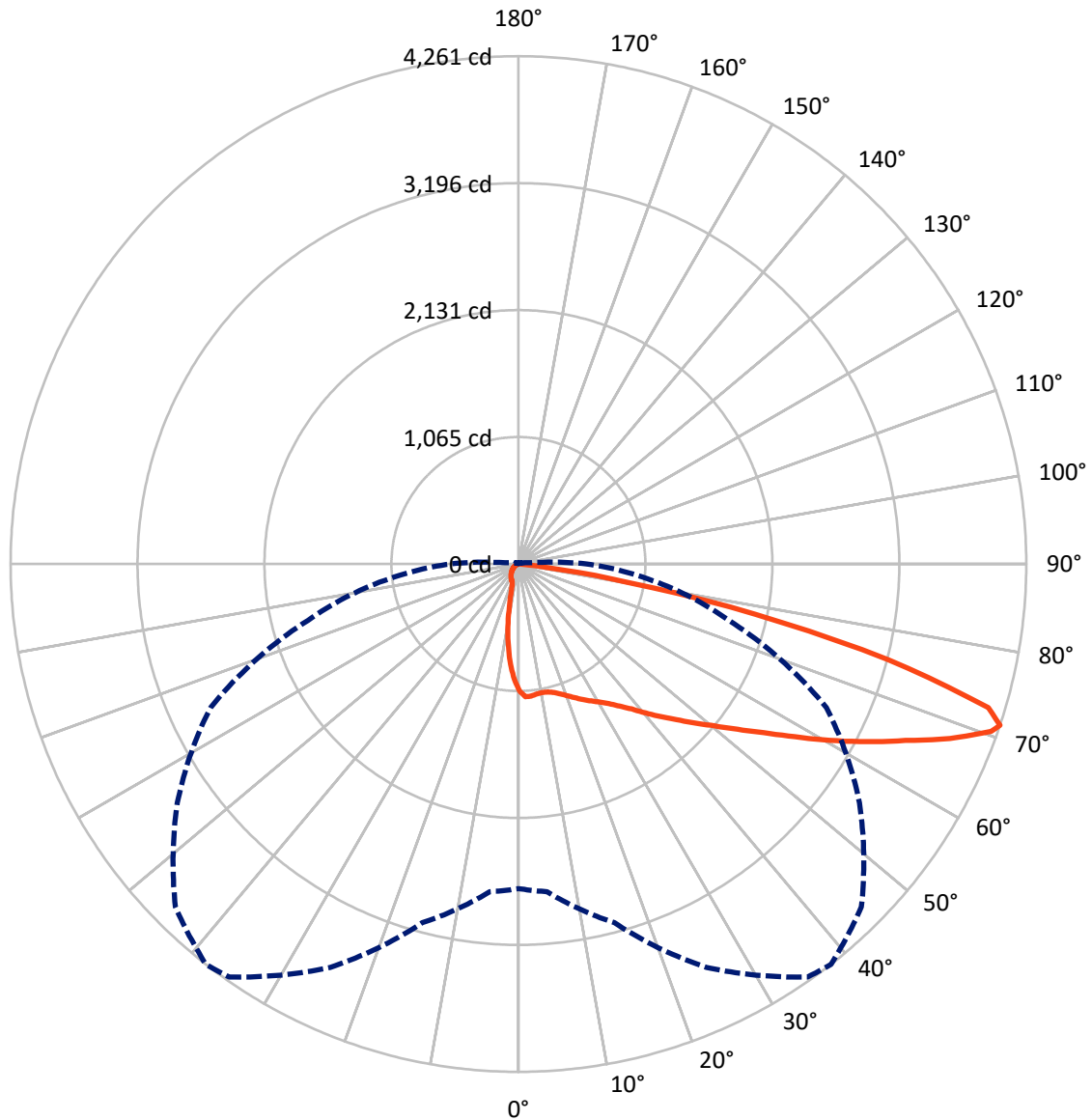


Based on 10 foot mounting height. Maximum calculated value = 10.9 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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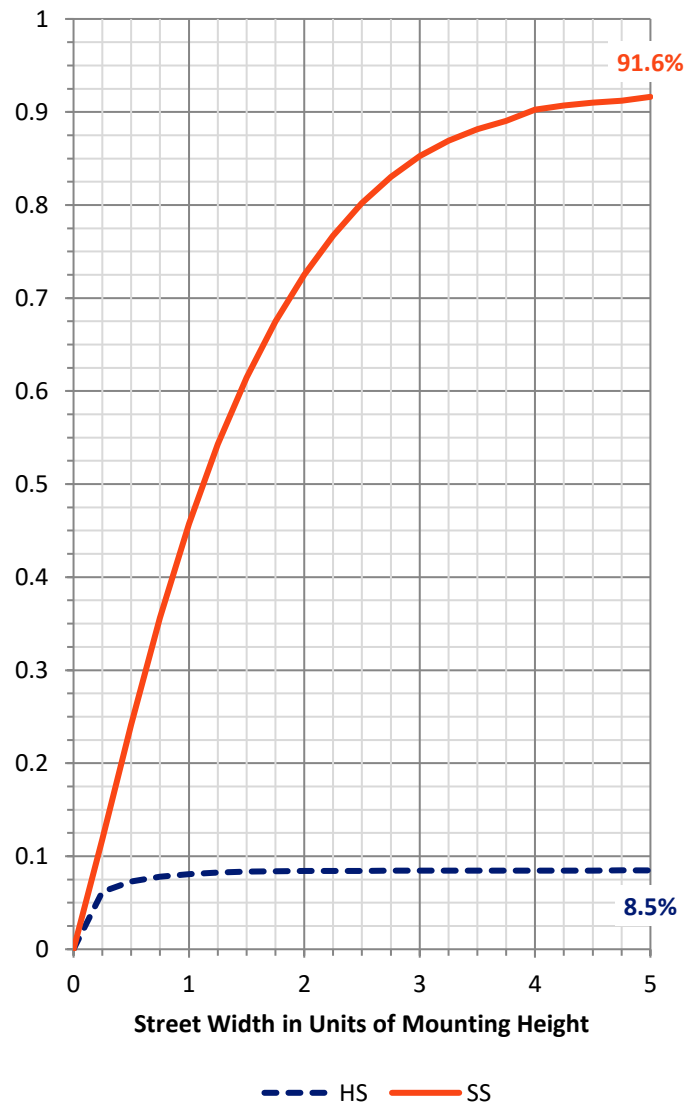
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	493.0	0.0	493.0
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	5279.0	0.0	5279.0
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	5772.0	0.0	5772.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.9	1.6
10°-20°	217.6	3.8
20°-30°	348.9	6.0
30°-40°	530.8	9.2
40°-50°	827.3	14.3
50°-60°	1209.7	21.0
60°-70°	1551.7	26.9
70°-80°	948.4	16.4
80°-90°	47.6	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°	5772.0	100.0
0°-180°	5772.0	100.0



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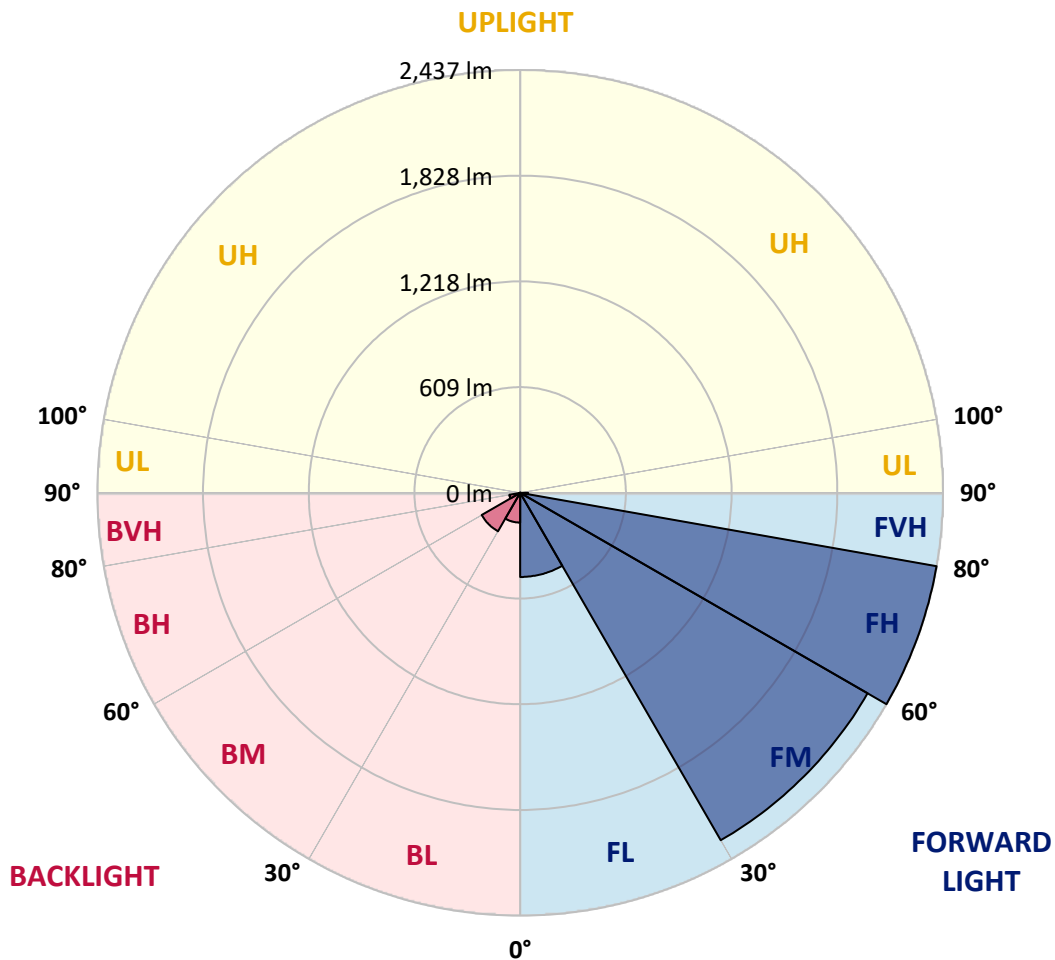
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	485.0	8.4			
FM	(30°-60°)	2311.8	40.1			
FH	(60°-80°)	2436.7	42.2			G2/5000
FVH	(80°-90°)	45.5	0.8			G1/100
BL	(0°-30°)	171.5	3.0	B1/500		
BM	(30°-60°)	256.1	4.4	B1/1000		
BH	(60°-80°)	63.4	1.1	B0/110		G0/110
BVH	(80°-90°)	2.1	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1
2.5°	1127.1	1124.1	1127.1	1124.1	1118.1	1115.1	1111.1	1100.1	1090.1	1078.1	1060.1
5°	1129.1	1127.1	1127.1	1123.1	1116.1	1113.1	1109.1	1098.1	1085.1	1067.1	1040.1
7.5°	1118.1	1117.1	1115.1	1111.1	1103.1	1101.1	1098.1	1085.1	1072.1	1053.1	1020.1
10°	1100.1	1102.1	1101.1	1101.1	1098.1	1096.1	1094.1	1079.1	1065.1	1043.1	1008.1
12.5°	1083.1	1085.1	1090.1	1098.1	1101.1	1102.1	1102.1	1087.1	1070.1	1046.1	1010.1
15°	1072.1	1076.1	1090.1	1106.1	1115.1	1118.1	1121.1	1105.1	1085.1	1059.1	1021.1
17.5°	1069.1	1075.1	1102.1	1127.1	1144.1	1146.1	1146.1	1126.1	1105.1	1075.1	1034.1
20°	1079.1	1087.1	1122.1	1157.1	1178.1	1180.1	1176.1	1150.1	1125.1	1092.1	1045.1
22.5°	1109.1	1116.1	1156.1	1197.1	1217.1	1219.1	1210.1	1174.1	1147.1	1120.1	1060.1
25°	1161.1	1165.1	1208.1	1247.1	1258.1	1261.1	1246.1	1203.1	1172.1	1147.1	1081.1
27.5°	1230.1	1232.1	1271.1	1300.1	1302.1	1301.1	1285.1	1240.1	1209.1	1188.1	1113.1
30°	1302.1	1305.1	1337.1	1356.1	1348.1	1344.1	1330.1	1282.1	1254.1	1238.1	1159.1
32.5°	1369.1	1372.1	1407.1	1417.1	1399.1	1396.1	1386.1	1335.1	1311.1	1319.1	1225.1
35°	1435.1	1435.1	1475.1	1480.1	1464.1	1464.1	1464.1	1403.1	1399.1	1426.1	1317.1
37.5°	1494.1	1504.1	1546.1	1544.1	1541.1	1543.1	1549.1	1503.1	1517.1	1563.1	1438.1
40°	1544.1	1557.1	1613.1	1618.1	1631.1	1642.1	1651.1	1627.1	1660.1	1735.1	1593.1
42.5°	1589.1	1604.1	1676.1	1699.1	1735.1	1750.1	1767.1	1761.1	1834.1	1971.1	1791.1
45°	1647.1	1663.1	1737.1	1792.1	1842.1	1862.1	1900.1	1926.1	2047.2	2203.2	2005.1
47.5°	1724.1	1735.1	1803.1	1890.1	1958.1	1994.1	2053.2	2120.2	2267.2	2449.2	2196.2
50°	1829.1	1830.1	1881.1	1994.1	2095.2	2134.2	2236.2	2323.2	2507.2	2666.2	2334.2
52.5°	1945.1	1939.1	1979.1	2122.2	2250.2	2303.2	2423.2	2544.2	2729.2	2823.2	2396.2
55°	2055.2	2058.2	2083.2	2258.2	2445.2	2496.2	2648.2	2771.2	2932.2	2919.2	2430.2
57.5°	2182.2	2181.2	2213.2	2407.2	2673.2	2732.2	2891.2	2992.2	3055.2	2988.2	2436.2
60°	2302.2	2299.2	2348.2	2585.2	2916.2	3003.2	3146.2	3142.2	3178.2	3032.2	2431.2
62.5°	2409.2	2416.2	2502.2	2792.2	3188.2	3282.2	3354.3	3304.2	3314.2	3083.2	2369.2
65°	2539.2	2552.2	2691.2	3043.2	3524.3	3569.3	3597.3	3516.3	3416.3	3042.2	2181.2
67.5°	2703.2	2742.2	2938.2	3413.3	3874.3	3905.3	3906.3	3644.3	3412.3	2835.2	1834.1
70°	2768.2	2809.2	3121.2	3706.3	4169.3	4208.3	4086.3	3624.3	3143.2	2220.2	1238.1
71°	2723.2	2760.2	3116.2	3734.3	4230.3	4261.3	4070.3	3493.3	2850.2	1829.1	959.1
72.5°	2398.2	2494.2	2924.2	3558.3	4121.3	4122.3	3811.3	3184.2	2267.2	1142.1	482.0
75°	1295.1	1411.1	2143.2	2708.2	3179.2	3204.2	2932.2	2211.2	1097.1	296.0	117.0
77.5°	427.0	481.0	961.1	1406.1	1994.1	2033.2	1793.1	982.1	346.0	100.0	61.0
80°	268.0	274.0	325.0	591.0	887.1	920.1	738.1	398.0	156.0	55.0	42.0
82.5°	45.0	54.0	153.0	174.0	313.0	248.0	168.0	203.0	73.0	25.0	36.0
85°	0.0	0.0	1.0	1.0	5.0	1.0	1.0	41.0	4.0	4.0	19.0
87.5°	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1	1064.1
2.5°	1052.1	1044.1	1028.1	1011.1	990.1	972.1	966.1	953.1	947.1	942.1	942.1
5°	1023.1	1009.1	975.1	940.1	906.1	870.1	837.1	806.1	791.1	770.1	780.1
7.5°	999.1	975.1	927.1	872.1	802.1	731.1	676.1	628.0	588.0	575.0	566.0
10°	982.1	952.1	882.1	798.1	696.1	595.0	510.0	431.0	385.0	357.0	357.0
12.5°	980.1	942.1	851.1	722.1	575.0	438.0	333.0	258.0	221.0	204.0	203.0
15°	987.1	941.1	823.1	653.0	464.0	304.0	208.0	175.0	166.0	164.0	164.0
17.5°	993.1	940.1	790.1	575.0	342.0	200.0	165.0	159.0	157.0	156.0	156.0
20°	999.1	935.1	752.1	487.0	242.0	163.0	154.0	151.0	150.0	149.0	149.0
22.5°	1007.1	930.1	713.1	387.0	179.0	152.0	147.0	144.0	143.0	143.0	143.0
25°	1018.1	927.1	665.0	293.0	154.0	144.0	139.0	137.0	137.0	136.0	136.0
27.5°	1039.1	930.1	613.0	210.0	144.0	136.0	133.0	131.0	131.0	130.0	130.0
30°	1068.1	939.1	548.0	164.0	136.0	128.0	125.0	124.0	123.0	123.0	123.0
32.5°	1109.1	953.1	477.0	140.0	126.0	120.0	117.0	116.0	116.0	116.0	115.0
35°	1172.1	982.1	390.0	128.0	117.0	111.0	108.0	108.0	108.0	107.0	108.0
37.5°	1268.1	1029.1	302.0	118.0	107.0	102.0	100.0	99.0	99.0	99.0	99.0
40°	1389.1	1105.1	220.0	109.0	98.0	93.0	91.0	90.0	89.0	89.0	89.0
42.5°	1545.1	1189.1	160.0	99.0	90.0	85.0	83.0	81.0	79.0	78.0	78.0
45°	1707.1	1289.1	125.0	91.0	82.0	78.0	76.0	73.0	70.0	67.0	67.0
47.5°	1864.1	1366.1	107.0	82.0	75.0	71.0	69.0	65.0	60.0	57.0	57.0
50°	1963.1	1390.1	96.0	74.0	68.0	65.0	62.0	57.0	50.0	47.0	47.0
52.5°	1994.1	1346.1	86.0	67.0	62.0	59.0	55.0	48.0	41.0	37.0	37.0
55°	2006.2	1261.1	76.0	62.0	56.0	52.0	47.0	40.0	33.0	29.0	29.0
57.5°	1991.1	1141.1	68.0	56.0	50.0	46.0	40.0	32.0	25.0	22.0	22.0
60°	1940.1	967.1	61.0	50.0	44.0	39.0	33.0	25.0	19.0	15.0	16.0
62.5°	1802.1	748.1	53.0	42.0	38.0	33.0	26.0	19.0	12.0	10.0	10.0
65°	1582.1	518.0	45.0	35.0	32.0	27.0	20.0	13.0	7.0	6.0	6.0
67.5°	1285.1	335.0	35.0	29.0	27.0	22.0	15.0	8.0	4.0	4.0	3.0
70°	807.1	166.0	28.0	22.0	22.0	17.0	11.0	5.0	3.0	3.0	3.0
71°	571.0	113.0	25.0	20.0	20.0	16.0	10.0	4.0	3.0	3.0	3.0
72.5°	258.0	71.0	21.0	18.0	17.0	13.0	9.0	4.0	4.0	4.0	4.0
75°	81.0	39.0	15.0	14.0	14.0	11.0	8.0	5.0	5.0	5.0	5.0
77.5°	54.0	30.0	10.0	9.0	11.0	11.0	8.0	6.0	6.0	6.0	6.0
80°	44.0	16.0	6.0	6.0	8.0	10.0	8.0	6.0	7.0	6.0	6.0
82.5°	43.0	8.0	2.0	3.0	5.0	6.0	6.0	5.0	6.0	6.0	6.0
85°	18.0	2.0	1.0	2.0	2.0	3.0	3.0	4.0	5.0	5.0	5.0
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0	3.0	4.0	4.0
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)