

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: P401739

Luminaire Tested: **ENT-SA1E-827-U-SL3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401739  
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: ENT-SA1E-827-U-SL3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 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: 4333 lumens  
Efficiency: N/A  
Efficacy: 75.8 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 - G1

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

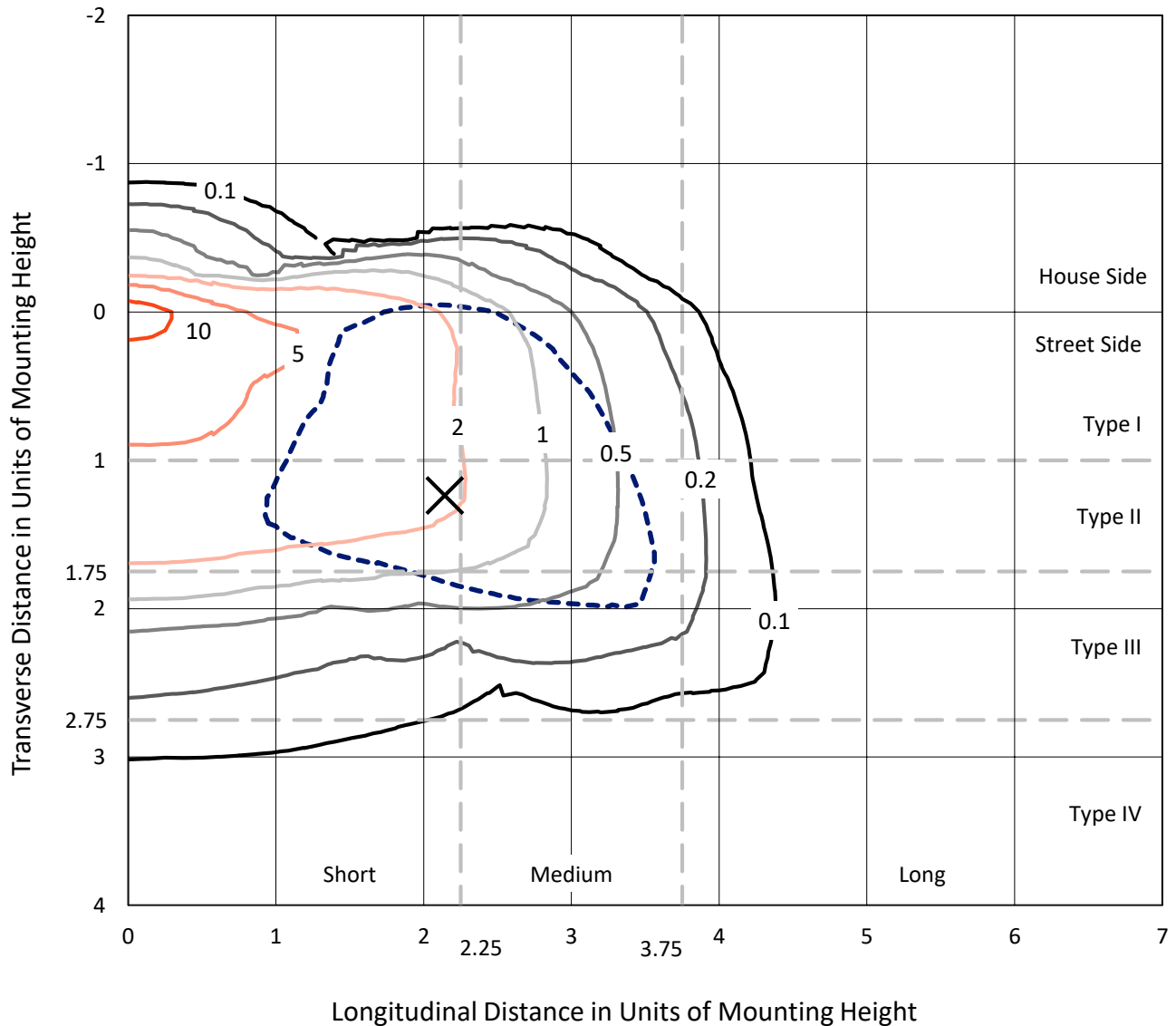


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

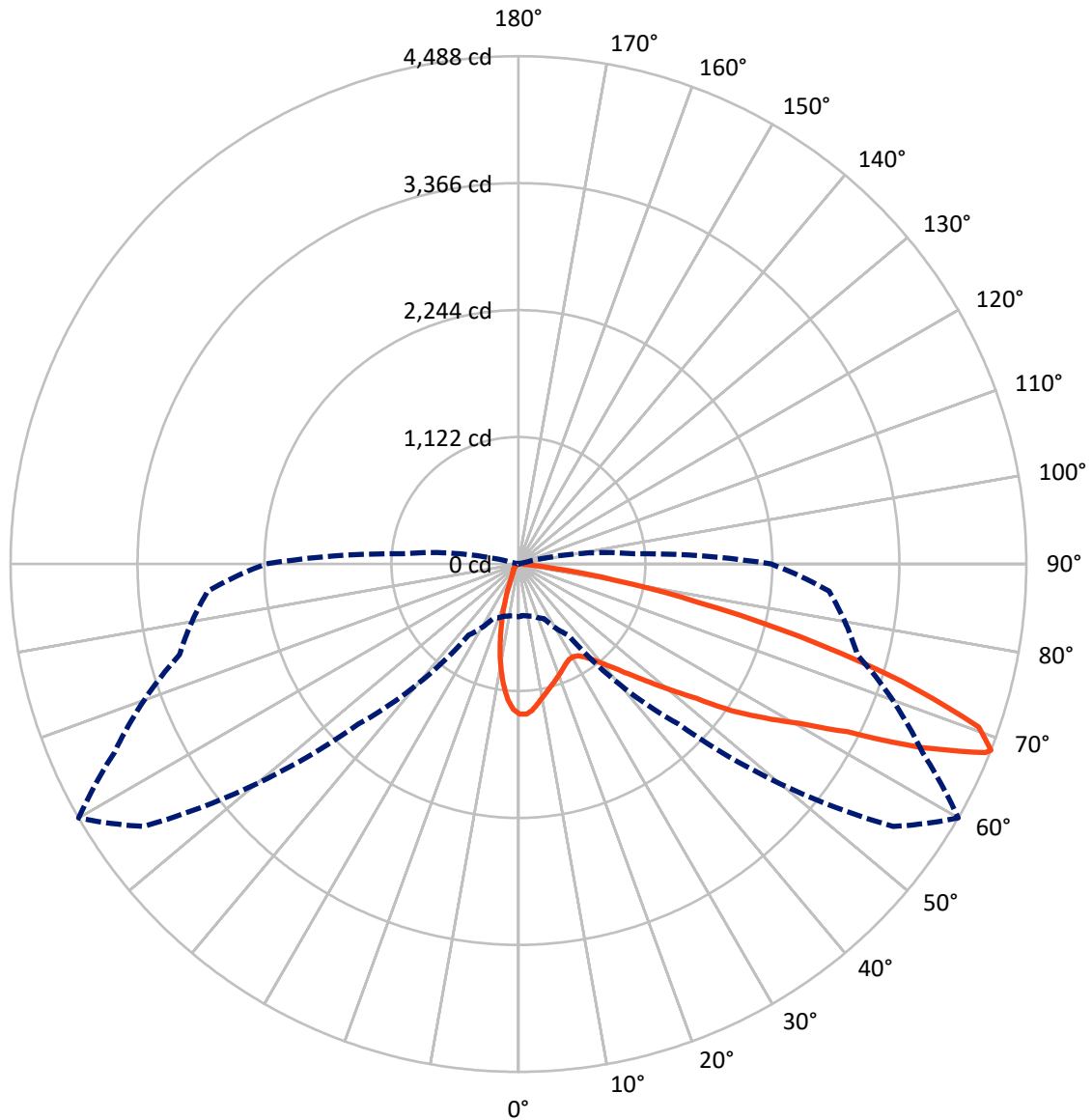


Based on 10 foot mounting height. Maximum calculated value = 13.3 fc  
 Type III - Short - Semi-Cutoff

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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	484.4	0.0	484.4
	% Fixture	11.2	0.0	11.2
<b>Street Side</b>	Lumens	3848.5	0.0	3848.5
	% Fixture	88.8	0.0	88.8
<b>Total</b>	Lumens	4333.0	0.0	4333.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.6	2.5
10°-20°	219.5	5.1
20°-30°	289.0	6.7
30°-40°	398.8	9.2
40°-50°	604.6	14.0
50°-60°	975.6	22.5
60°-70°	1158.9	26.7
70°-80°	546.3	12.6
80°-90°	32.6	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°	4333.0	100.0
0°-180°	4333.0	100.0



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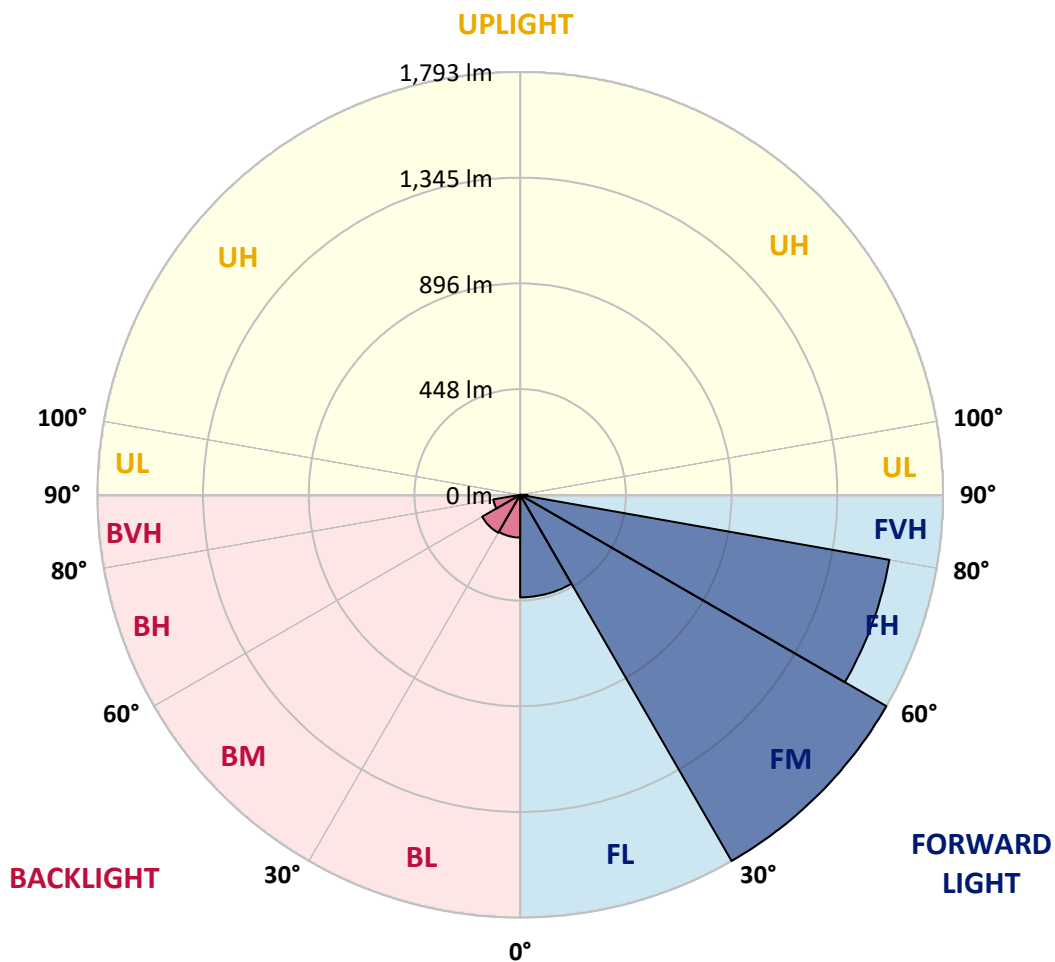
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	434.9	10.0			
FM	(30°-60°)	1792.8	41.4			
FH	(60°-80°)	1589.6	36.7			G1/1800
FVH	(80°-90°)	31.2	0.7			G1/100
BL	(0°-30°)	181.3	4.2	B1/500		
BM	(30°-60°)	186.2	4.3	B0/220		
BH	(60°-80°)	115.6	2.7	B1/500		G1/500
BVH	(80°-90°)	1.4	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-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3
2.5°	1314.5	1311.6	1319.7	1321.9	1324.1	1328.5	1327.8	1328.5	1329.2	1327.8	1318.9
5°	1224.8	1230.0	1237.3	1246.9	1256.4	1278.5	1287.3	1296.1	1302.0	1306.4	1298.3
7.5°	1136.6	1146.9	1152.8	1170.4	1185.1	1207.9	1227.0	1242.5	1257.2	1273.3	1265.3
10°	1066.0	1069.7	1074.8	1091.0	1113.1	1147.6	1172.6	1191.7	1209.4	1236.6	1230.0
12.5°	996.9	999.1	1009.4	1027.1	1049.9	1092.5	1125.6	1147.6	1167.5	1201.3	1202.0
15°	946.2	946.9	953.5	969.7	996.2	1041.8	1084.4	1108.7	1136.6	1177.8	1180.0
17.5°	913.1	912.4	913.8	924.1	949.1	992.5	1044.0	1072.6	1105.7	1158.7	1160.9
20°	902.8	901.3	898.4	896.2	911.6	949.1	1007.2	1038.8	1077.8	1144.7	1145.4
22.5°	911.6	908.7	902.1	889.6	894.0	918.3	966.8	1005.0	1052.8	1137.3	1132.2
25°	933.0	933.0	924.1	904.3	894.0	899.1	938.1	974.9	1027.8	1133.7	1122.6
27.5°	968.2	966.8	955.0	934.4	915.3	901.3	920.5	955.0	1009.4	1138.1	1118.2
30°	1010.9	1006.5	994.0	979.3	955.7	925.6	924.1	949.9	1000.6	1152.0	1121.2
32.5°	1051.3	1051.3	1046.2	1032.2	1009.4	969.7	946.9	967.5	1011.6	1174.8	1130.7
35°	1101.3	1100.6	1102.0	1096.9	1077.1	1035.1	998.4	1008.7	1045.4	1213.1	1153.5
37.5°	1141.0	1141.8	1154.2	1163.1	1154.2	1110.1	1071.9	1071.9	1102.8	1270.4	1192.5
40°	1180.0	1181.5	1205.0	1230.7	1232.9	1197.6	1160.9	1160.1	1177.8	1341.0	1252.8
42.5°	1215.3	1221.2	1255.0	1299.1	1324.8	1301.3	1274.1	1265.3	1274.1	1447.6	1350.5
45°	1252.8	1264.5	1311.6	1375.5	1417.4	1418.2	1407.9	1397.6	1402.0	1567.4	1481.4
47.5°	1301.3	1314.5	1373.3	1452.0	1531.4	1552.0	1561.5	1557.9	1546.1	1718.9	1650.5
50°	1380.0	1392.4	1447.6	1535.8	1644.6	1718.9	1744.6	1749.0	1733.6	1886.5	1842.4
52.5°	1513.8	1521.1	1572.6	1642.4	1764.5	1903.4	1971.0	1971.8	1937.2	2082.8	2049.7
55°	1657.1	1676.2	1736.5	1817.4	1943.1	2099.0	2268.1	2286.4	2179.8	2254.8	2201.2
57.5°	1659.3	1677.7	1777.7	1932.8	2196.0	2402.6	2553.3	2566.5	2448.2	2393.0	2343.8
60°	1484.3	1493.9	1632.9	1860.0	2286.4	2812.1	2878.3	2858.4	2636.4	2535.7	2522.4
62.5°	1047.6	1052.1	1216.7	1516.0	2086.5	3007.7	3373.1	3266.4	2904.0	2745.9	2790.0
65°	659.5	657.3	725.6	964.6	1552.0	2815.0	3984.7	3906.8	3395.8	3009.1	2998.8
67.5°	486.7	474.9	493.3	567.6	886.6	2210.0	4097.2	4448.6	3864.2	3118.7	2818.0
68°	466.8	456.6	475.7	533.0	766.8	2000.5	4042.8	4487.6	3938.4	3101.0	2756.2
70°	396.3	386.7	402.9	446.3	533.7	1298.3	3567.1	4314.8	4006.1	2951.1	2429.1
72.5°	281.6	286.7	329.4	383.0	452.1	666.1	2626.8	3543.6	3445.8	2624.6	1848.3
75°	166.9	176.4	232.3	308.8	415.4	439.6	1694.6	2576.1	2528.3	1817.4	1001.3
77.5°	58.8	62.5	115.4	205.9	342.6	348.5	944.0	1619.6	1506.4	742.5	295.5
80°	21.3	21.3	42.6	114.7	221.3	266.1	501.4	864.6	594.8	192.6	81.6
82.5°	3.7	3.7	9.6	39.0	97.8	141.9	233.1	307.3	176.4	42.6	40.4
85°	0.0	0.0	0.0	0.0	1.5	1.5	68.4	69.1	32.3	5.9	17.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.7	1.5	1.5	1.5	1.5	2.2
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°	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3	1326.3
2.5°	1315.3	1313.8	1305.7	1291.0	1278.5	1257.9	1254.2	1234.4	1227.0	1221.2	1227.0
5°	1292.5	1284.4	1257.2	1224.1	1179.2	1126.3	1095.4	1052.8	1044.0	1020.4	1034.4
7.5°	1255.0	1236.6	1185.9	1114.5	1032.2	951.3	889.6	830.0	779.3	761.7	756.5
10°	1215.3	1189.5	1104.3	994.0	874.9	750.6	658.7	572.7	524.9	480.1	478.6
12.5°	1177.8	1138.8	1015.3	861.6	695.5	547.7	428.6	338.2	281.6	250.7	258.8
15°	1147.6	1095.4	925.6	729.3	519.0	352.9	242.6	184.5	164.7	155.1	156.6
17.5°	1118.2	1049.1	838.9	591.1	369.8	217.6	157.3	137.5	131.6	129.4	127.9
20°	1091.8	1004.3	747.7	466.1	244.1	150.7	129.4	122.8	120.6	119.1	119.1
22.5°	1065.3	957.2	656.5	345.5	166.9	123.5	116.2	113.2	111.7	109.5	109.5
25°	1041.0	911.6	565.4	241.9	127.9	110.3	105.1	102.2	99.3	97.0	97.0
27.5°	1022.6	877.1	480.8	171.3	107.3	99.3	94.1	89.0	85.3	82.3	82.3
30°	1010.9	843.3	399.2	129.4	95.6	88.2	81.6	75.0	69.1	65.4	64.7
32.5°	1004.3	815.3	323.5	105.9	85.3	77.2	69.1	61.8	55.1	50.7	50.7
35°	1007.2	793.3	247.8	89.7	77.2	67.6	58.8	50.0	44.1	40.4	39.7
37.5°	1026.3	780.8	184.5	79.4	69.1	58.8	50.0	41.2	35.3	32.3	31.6
40°	1062.3	783.7	140.4	72.0	63.2	51.5	41.2	33.8	28.7	25.7	25.7
42.5°	1135.1	805.0	111.0	66.2	56.6	44.1	34.6	27.9	23.5	21.3	20.6
45°	1231.4	845.5	91.2	61.0	50.0	37.5	29.4	23.5	19.1	16.9	16.9
47.5°	1377.0	910.2	78.7	55.9	43.4	31.6	24.3	19.1	14.7	13.2	12.5
50°	1545.4	1000.6	69.1	50.0	38.2	26.5	20.6	14.7	11.8	9.6	9.6
52.5°	1717.4	1101.3	62.5	44.8	33.1	22.8	16.2	11.0	8.1	6.6	6.6
55°	1875.5	1185.9	55.9	40.4	27.9	19.1	13.2	8.8	5.9	4.4	4.4
57.5°	2028.4	1263.1	48.5	35.3	22.8	15.4	10.3	6.6	4.4	2.9	2.9
60°	2220.3	1363.0	41.9	30.1	18.4	12.5	8.1	5.1	2.9	2.2	1.5
62.5°	2451.9	1435.8	35.3	24.3	14.7	9.6	5.9	3.7	2.2	0.7	0.7
65°	2537.1	1339.5	29.4	19.9	11.8	7.4	4.4	2.9	1.5	0.7	0.7
67.5°	2298.9	1079.3	23.5	15.4	8.8	5.1	3.7	2.2	1.5	0.7	0.7
68°	2232.8	1026.3	22.8	14.7	8.1	5.1	2.9	2.2	0.7	0.7	0.0
70°	1885.0	824.1	18.4	11.0	6.6	4.4	2.9	1.5	0.7	0.7	0.0
72.5°	1397.6	568.3	13.2	7.4	4.4	2.9	2.2	1.5	0.7	0.7	0.0
75°	737.4	221.3	10.3	5.9	3.7	2.9	2.2	2.2	1.5	0.7	0.7
77.5°	211.7	69.8	8.1	4.4	3.7	3.7	3.7	2.9	2.9	2.2	1.5
80°	61.8	22.8	5.1	2.9	3.7	3.7	4.4	3.7	3.7	2.9	2.9
82.5°	33.1	8.8	2.9	2.2	2.2	2.9	3.7	2.9	2.2	1.5	0.7
85°	14.0	2.9	2.2	1.5	1.5	1.5	1.5	1.5	1.5	0.7	0.7
87.5°	0.7	1.5	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)