

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: P401737

Luminaire Tested: **ENT-SA1E-827-U-SL2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401737  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1E-827-U-SL2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4180 lumens  
Efficiency: N/A  
Efficacy: 73.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-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

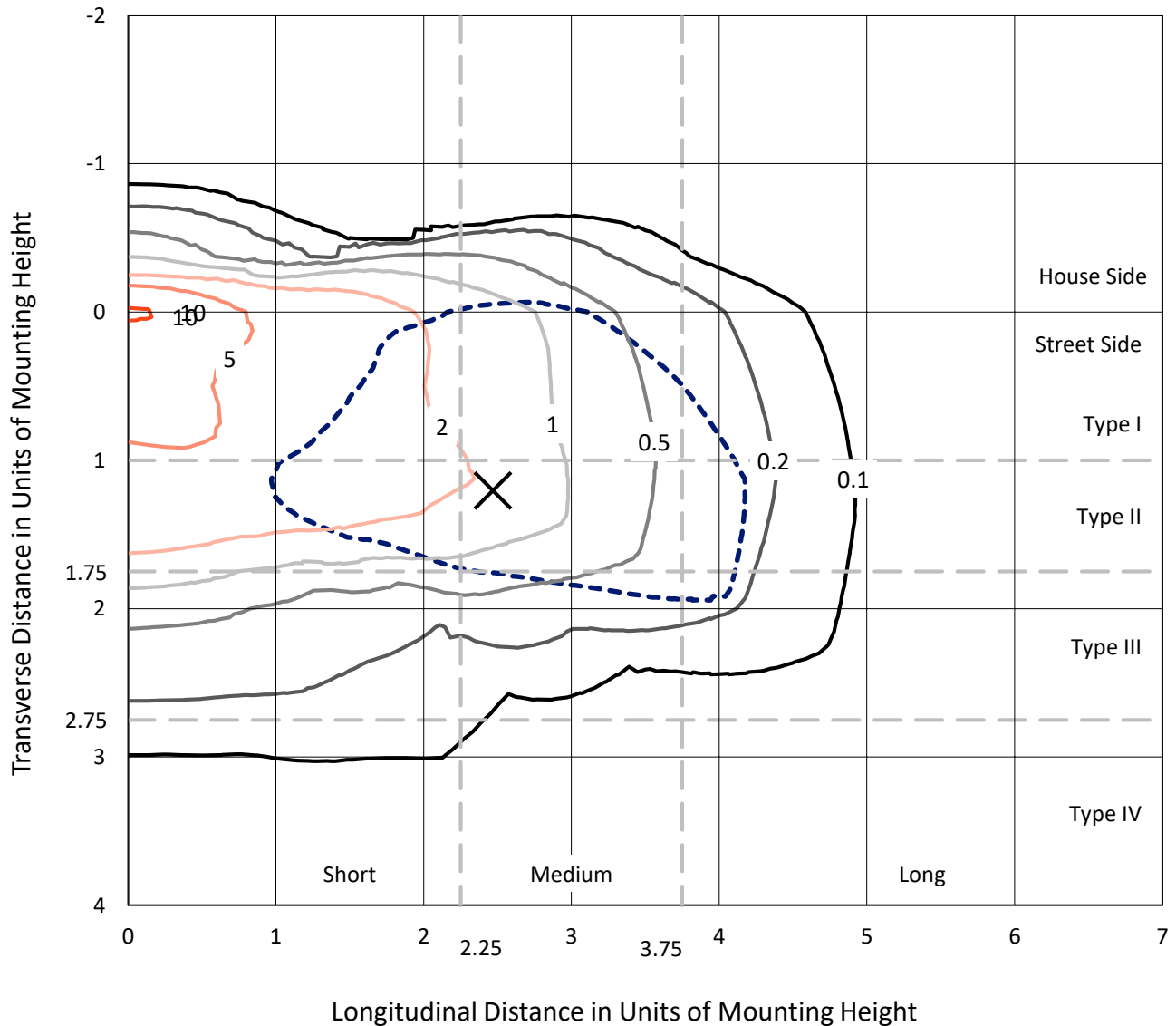


REPORT NUMBER: P401737

CATALOG NUMBER: ENT-SA1E-827-U-SL2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

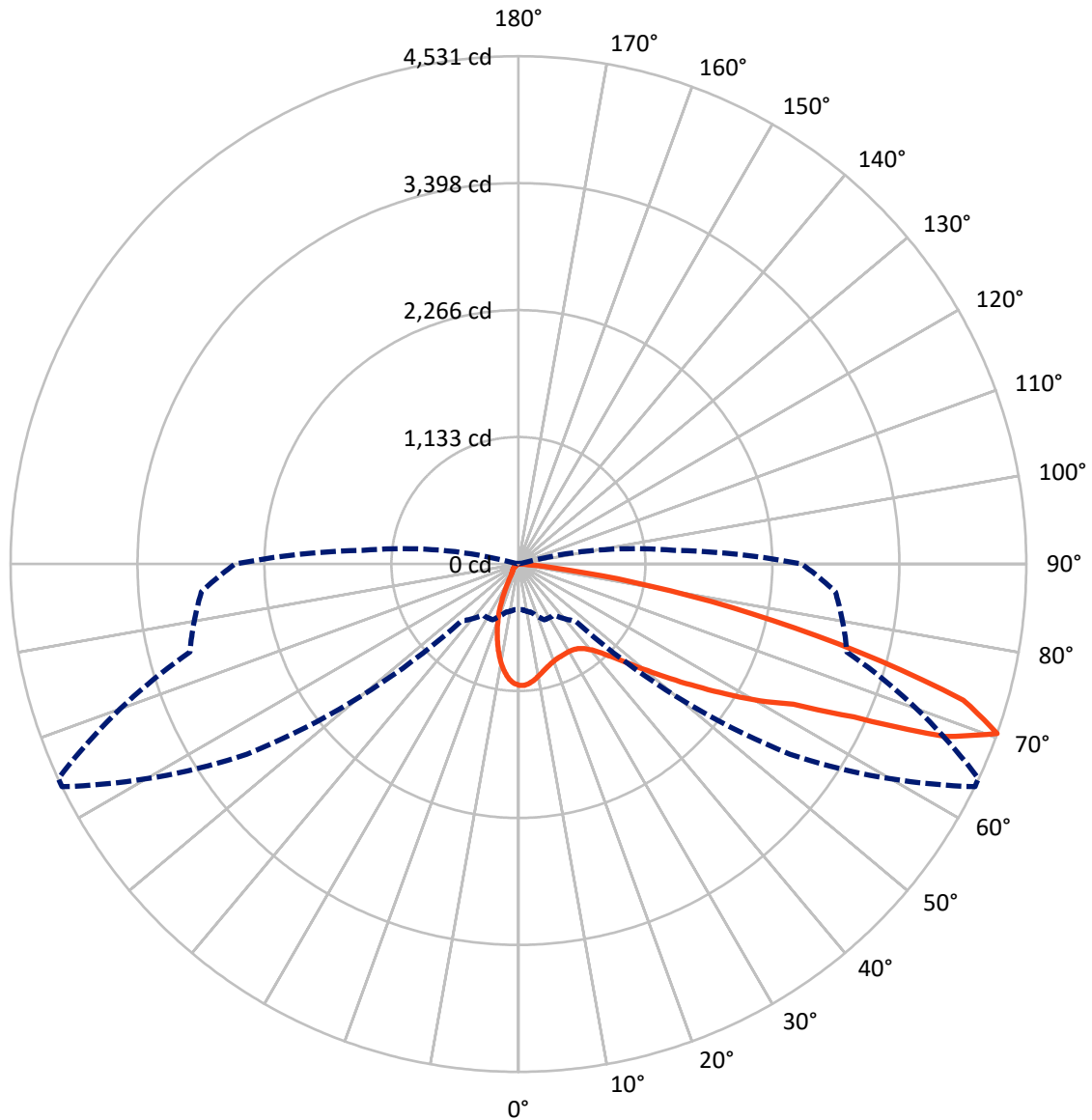


Based on 10 foot mounting height. Maximum calculated value = 10.8 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401737

CATALOG NUMBER: ENT-SA1E-827-U-SL2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P401737

CATALOG NUMBER: ENT-SA1E-827-U-SL2-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	537.0	0.0	537.0
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	3643.0	0.0	3643.0
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	4180.0	0.0	4180.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.2	2.2
10°-20°	202.3	4.8
20°-30°	278.7	6.7
30°-40°	383.7	9.2
40°-50°	571.9	13.7
50°-60°	903.5	21.6
60°-70°	1023.7	24.5
70°-80°	672.2	16.1
80°-90°	52.7	1.3
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°	4180.0	100.0
0°-180°	4180.0	100.0



REPORT NUMBER: P401737

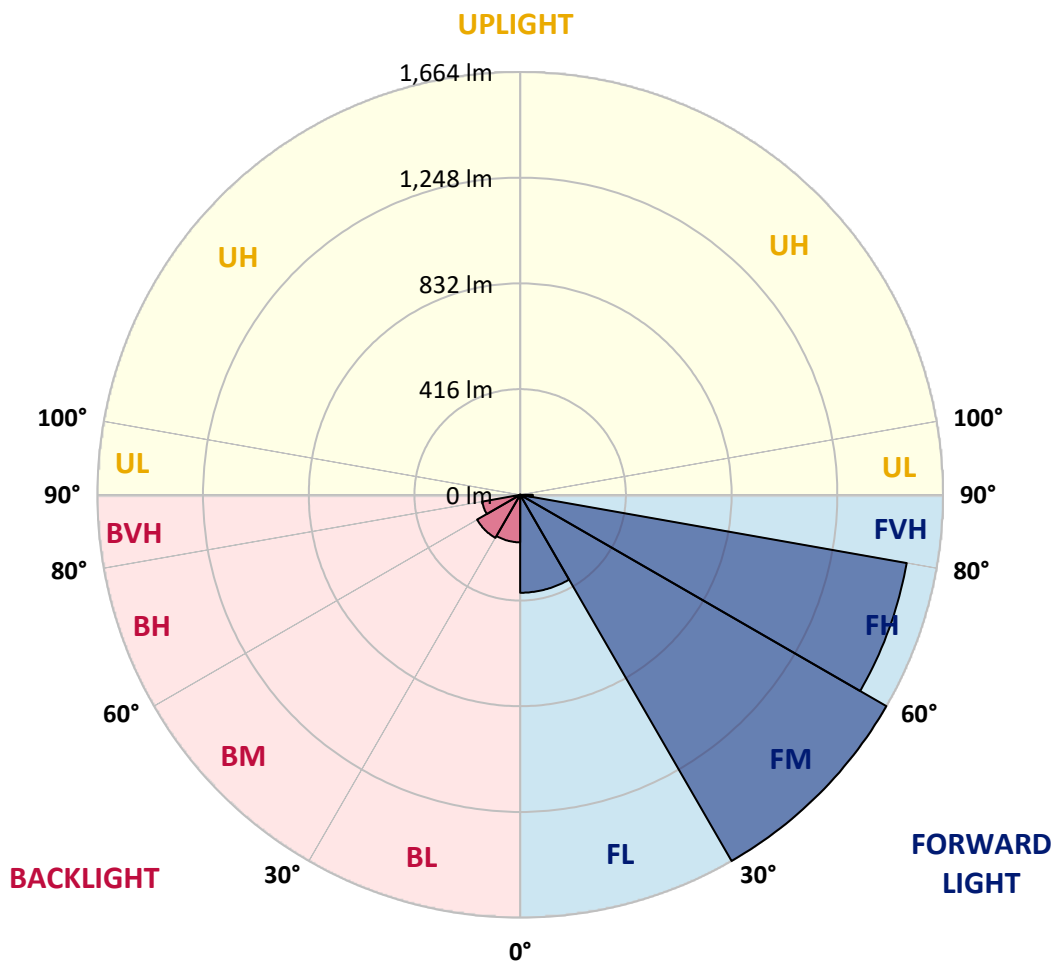
CATALOG NUMBER: ENT-SA1E-827-U-SL2-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	385.3	9.2			
FM	(30°-60°)	1663.6	39.8			
FH	(60°-80°)	1544.3	36.9			G1/1800
FVH	(80°-90°)	49.8	1.2			G1/100
BL	(0°-30°)	186.9	4.5	B1/500		
BM	(30°-60°)	195.6	4.7	B0/220		
BH	(60°-80°)	151.6	3.6	B1/500		G1/500
BVH	(80°-90°)	2.9	0.1			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 Medium





REPORT NUMBER: P401737

CATALOG NUMBER: ENT-SA1E-827-U-SL2-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0
2.5°	1051.9	1051.9	1057.1	1062.2	1065.1	1073.2	1079.1	1083.5	1083.5	1086.5	1081.3
5°	982.1	982.1	986.5	999.0	1012.2	1029.1	1048.2	1067.3	1071.0	1085.0	1084.2
7.5°	917.4	923.3	930.6	943.1	957.1	982.1	1008.5	1041.6	1045.3	1079.1	1086.5
10°	872.5	876.2	880.6	894.6	915.2	943.8	972.5	1011.5	1018.1	1068.8	1086.5
12.5°	836.5	837.3	843.9	859.3	879.2	907.1	939.4	982.1	990.2	1050.4	1083.5
15°	810.8	810.1	817.4	832.1	851.2	879.9	911.5	956.3	965.2	1035.0	1082.8
17.5°	795.4	796.1	802.0	813.0	831.4	858.6	890.9	935.0	943.8	1022.5	1086.5
20°	795.4	795.4	799.0	804.2	818.1	842.4	874.0	919.6	928.4	1014.4	1091.6
22.5°	810.8	809.3	812.3	807.9	814.5	831.4	863.7	909.3	918.9	1010.7	1099.7
25°	838.7	835.8	838.0	828.4	821.1	828.4	857.1	904.9	915.2	1011.5	1107.0
27.5°	877.7	877.7	873.3	860.0	841.7	833.6	856.4	901.9	912.2	1011.5	1112.2
30°	932.1	929.9	923.3	910.0	881.4	854.2	863.7	901.9	912.2	1012.2	1113.7
32.5°	986.5	988.0	991.6	978.4	939.4	889.5	881.4	908.6	917.4	1011.5	1111.4
35°	1041.6	1042.3	1058.5	1060.0	1010.0	946.1	911.5	926.2	932.1	1018.8	1112.9
37.5°	1090.1	1093.8	1125.4	1140.9	1099.7	1018.8	959.3	959.3	962.2	1038.7	1121.7
40°	1144.5	1154.1	1192.3	1226.9	1210.7	1112.2	1029.1	1007.8	1009.3	1074.7	1141.6
42.5°	1207.7	1219.5	1269.5	1319.5	1318.7	1226.9	1117.3	1085.0	1086.5	1137.2	1182.0
45°	1287.9	1296.0	1359.2	1421.7	1434.9	1353.3	1228.3	1185.7	1187.2	1232.0	1260.7
47.5°	1385.6	1395.2	1456.2	1531.2	1565.0	1505.5	1372.4	1326.1	1321.7	1353.3	1373.9
50°	1513.5	1531.9	1567.9	1640.0	1721.6	1681.9	1541.5	1495.2	1489.3	1514.3	1520.9
52.5°	1635.6	1652.5	1667.2	1733.3	1891.4	1900.9	1748.8	1698.0	1692.2	1698.0	1706.1
55°	1653.9	1663.5	1674.5	1764.2	2028.8	2179.5	1984.7	1924.5	1907.5	1896.5	1923.7
57.5°	1507.7	1501.8	1538.5	1660.6	2051.6	2487.5	2303.8	2186.9	2170.7	2109.7	2082.5
60°	1193.8	1185.7	1220.2	1387.1	1923.7	2640.4	2746.3	2477.2	2437.5	2233.2	2206.7
62.5°	838.7	829.2	874.0	972.5	1492.2	2610.3	3245.4	2752.2	2673.5	2342.7	2306.7
65°	646.1	641.7	666.0	688.0	910.8	2261.1	3520.3	3288.8	3126.3	2461.8	2415.5
67.5°	506.5	512.4	542.5	606.4	588.1	1409.2	3494.6	4107.7	3945.2	2680.9	2651.4
70°	407.2	408.7	446.2	548.4	555.0	717.4	2958.7	4531.1	4528.9	3034.4	2838.9
72.5°	246.3	252.9	313.9	474.1	560.1	549.1	1989.1	4151.8	4209.1	3116.8	2560.3
75°	118.3	125.0	162.5	318.3	556.5	534.4	1076.2	3143.2	3216.7	2794.8	2075.9
77.5°	44.1	50.0	75.0	155.8	412.4	489.6	566.0	2119.2	2177.3	2045.7	1406.2
80°	14.0	16.2	29.4	71.3	209.5	404.3	364.6	1195.2	1234.2	895.3	472.7
82.5°	1.5	2.2	8.1	24.3	80.9	205.8	213.9	449.9	469.7	175.0	95.6
85°	0.0	0.0	0.0	0.0	1.5	1.5	52.9	86.0	70.6	16.9	27.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.7	1.5	2.2	2.2	2.2	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P401737

CATALOG NUMBER: ENT-SA1E-827-U-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0	1082.0
2.5°	1080.6	1080.6	1075.4	1067.3	1057.1	1042.3	1038.7	1026.9	1026.9	1017.4	1015.9
5°	1082.0	1077.6	1060.7	1035.7	1001.2	963.7	940.2	914.4	892.4	878.4	879.9
7.5°	1082.0	1072.5	1038.7	983.5	918.9	854.2	804.9	747.6	721.1	703.5	711.6
10°	1079.1	1062.9	1004.1	920.3	818.1	728.5	647.6	581.5	535.9	516.8	500.6
12.5°	1072.5	1049.0	960.8	841.7	710.8	593.2	481.5	394.7	334.5	304.3	300.6
15°	1066.6	1034.3	910.0	755.7	589.5	435.9	310.9	227.9	176.4	164.7	166.1
17.5°	1065.1	1020.3	861.5	664.5	471.2	290.4	179.4	144.8	137.5	134.5	133.8
20°	1065.9	1007.8	808.6	574.1	333.7	180.8	136.0	127.9	125.0	123.5	122.8
22.5°	1068.8	993.8	756.4	479.3	227.9	132.3	121.3	116.1	112.5	110.3	109.5
25°	1068.8	978.4	698.3	378.6	149.2	116.1	108.8	102.2	97.0	94.1	94.1
27.5°	1066.6	960.8	638.1	287.4	118.3	103.6	95.6	86.7	80.1	76.4	76.4
30°	1060.0	939.4	580.0	200.7	103.6	92.6	82.3	71.3	63.2	59.5	58.1
32.5°	1050.4	916.7	513.1	141.1	93.4	80.9	69.1	57.3	50.0	45.6	45.6
35°	1040.1	893.9	441.1	108.1	84.5	71.3	58.1	46.3	39.7	36.8	36.0
37.5°	1035.0	869.6	370.5	93.4	75.7	61.0	47.0	37.5	32.3	30.1	29.4
40°	1038.7	851.2	301.4	83.8	67.6	51.5	39.0	31.6	27.2	24.3	24.3
42.5°	1060.7	840.9	236.0	76.4	60.3	43.4	32.3	25.7	21.3	19.1	19.1
45°	1105.6	848.3	179.4	69.8	51.5	36.0	27.2	20.6	16.2	14.0	14.0
47.5°	1180.5	877.7	136.0	64.0	44.1	29.4	22.1	16.2	12.5	11.0	10.3
50°	1290.1	935.8	106.6	58.1	36.8	25.0	18.4	12.5	9.6	8.1	8.1
52.5°	1448.1	1036.5	91.2	51.5	30.1	20.6	14.7	9.6	7.4	5.9	5.9
55°	1642.2	1164.4	82.3	45.6	24.3	16.9	11.8	7.4	5.1	4.4	3.7
57.5°	1799.5	1265.8	77.2	39.7	20.6	14.7	8.8	5.9	4.4	2.9	2.9
60°	1938.4	1331.2	68.4	33.1	17.6	11.8	7.4	4.4	2.9	2.2	2.2
62.5°	2050.9	1373.9	56.6	26.5	14.7	9.6	5.9	3.7	2.9	2.2	2.2
65°	2178.8	1408.4	46.3	20.6	12.5	8.1	5.1	2.9	2.2	2.2	2.2
67.5°	2429.5	1485.6	34.5	16.2	9.6	6.6	4.4	2.9	2.2	1.5	1.5
70°	2527.2	1395.2	27.2	13.2	7.4	5.9	4.4	2.9	1.5	1.5	1.5
72.5°	2150.9	1044.6	21.3	11.0	6.6	5.1	4.4	2.9	2.2	2.2	1.5
75°	1706.1	705.7	16.9	8.8	6.6	5.9	4.4	4.4	3.7	2.9	2.9
77.5°	1089.4	312.4	13.2	7.4	6.6	7.4	6.6	4.4	4.4	3.7	3.7
80°	324.9	75.0	9.6	5.9	5.1	5.9	6.6	4.4	2.9	2.2	2.2
82.5°	70.6	17.6	5.9	2.9	3.7	2.9	4.4	4.4	2.9	2.2	2.2
85°	23.5	6.6	3.7	2.9	2.2	2.2	2.2	2.2	2.2	2.2	1.5
87.5°	1.5	2.2	2.2	1.5	1.5	1.5	1.5	0.7	0.7	1.5	1.5
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)