

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: P401625

Luminaire Tested: **ENT-SA1E-727-U-T4FT-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401625  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1E-727-U-T4FT-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4166 lumens  
Efficiency: N/A  
Efficacy: 72.8 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

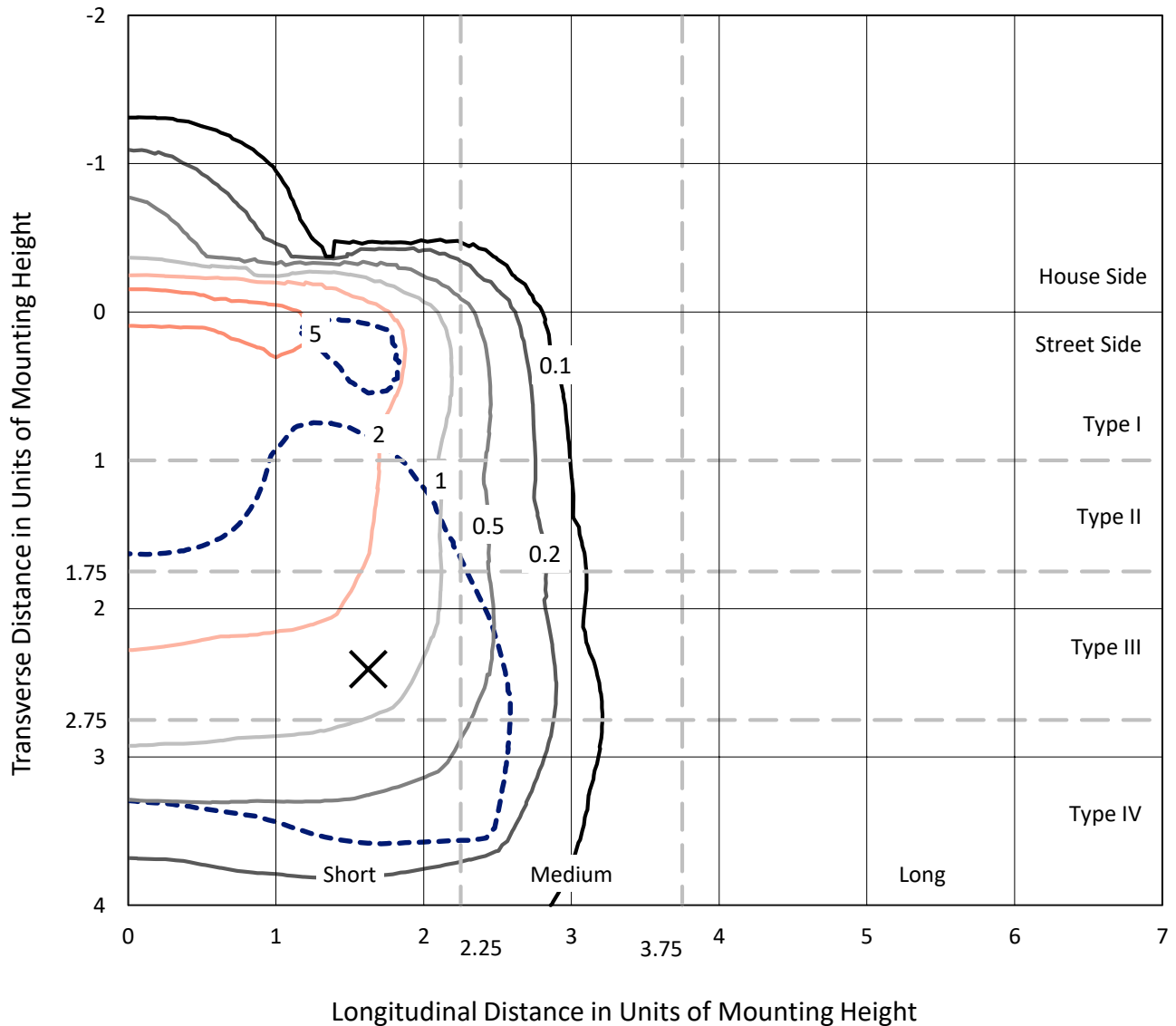
Input Watts (W): 57.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P401625  
 CATALOG NUMBER: ENT-SA1E-727-U-T4FT-HSS

### Iso-Footcandle Lines of Horizontal Illumination

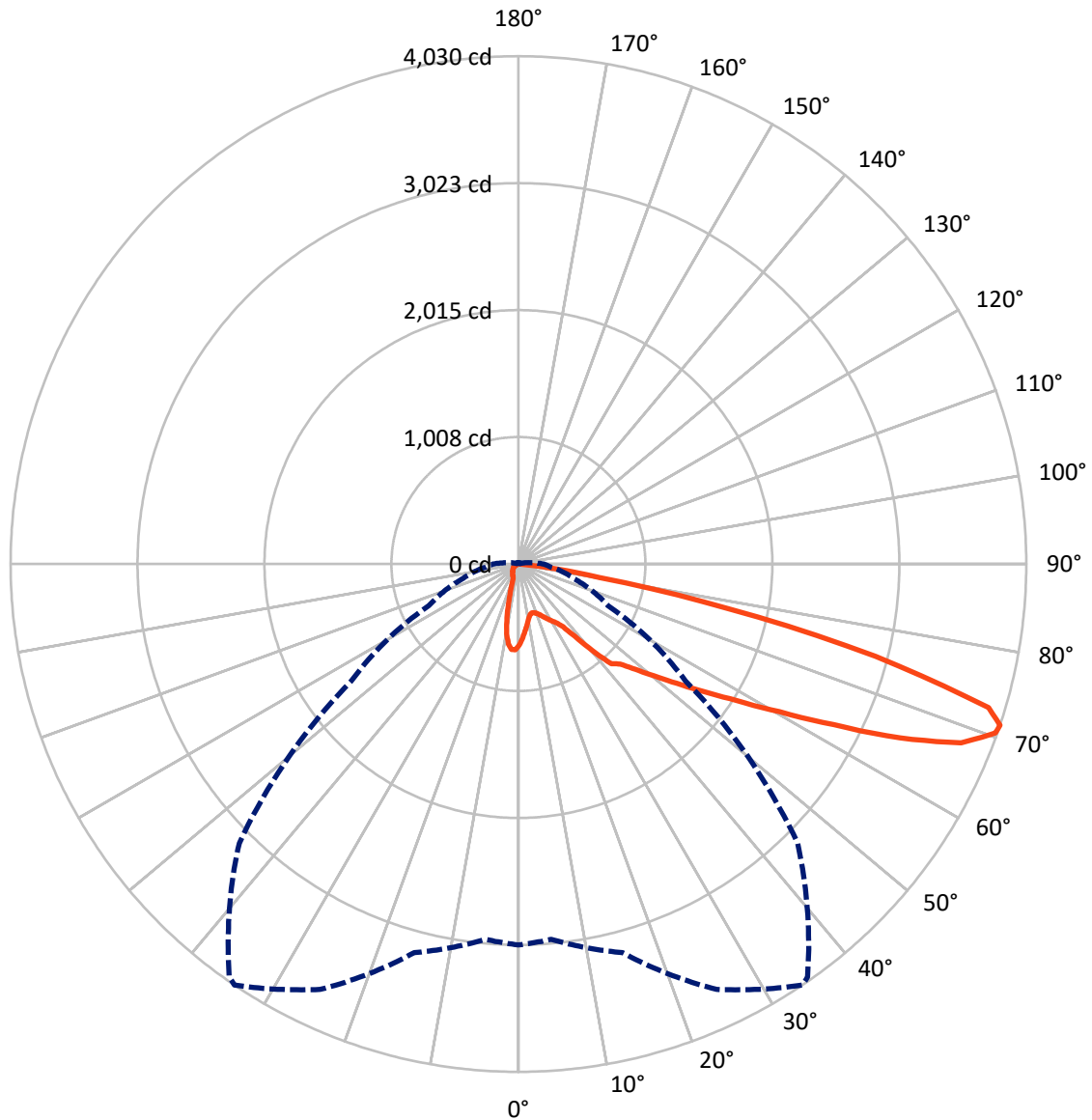
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P401625  
CATALOG NUMBER: ENT-SA1E-727-U-T4FT-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P401625

CATALOG NUMBER: ENT-SA1E-727-U-T4FT-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	460.7	0.0	460.7
	% Fixture	11.1	0.0	11.1
<b>Street Side</b>	Lumens	3705.3	0.0	3705.3
	% Fixture	88.9	0.0	88.9
<b>Total</b>	Lumens	4166.0	0.0	4166.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.9	1.4
10°-20°	130.4	3.1
20°-30°	194.6	4.7
30°-40°	325.1	7.8
40°-50°	587.1	14.1
50°-60°	931.5	22.4
60°-70°	1251.7	30.0
70°-80°	664.2	15.9
80°-90°	24.5	0.6
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°	4166.0	100.0
0°-180°	4166.0	100.0



REPORT NUMBER: P401625

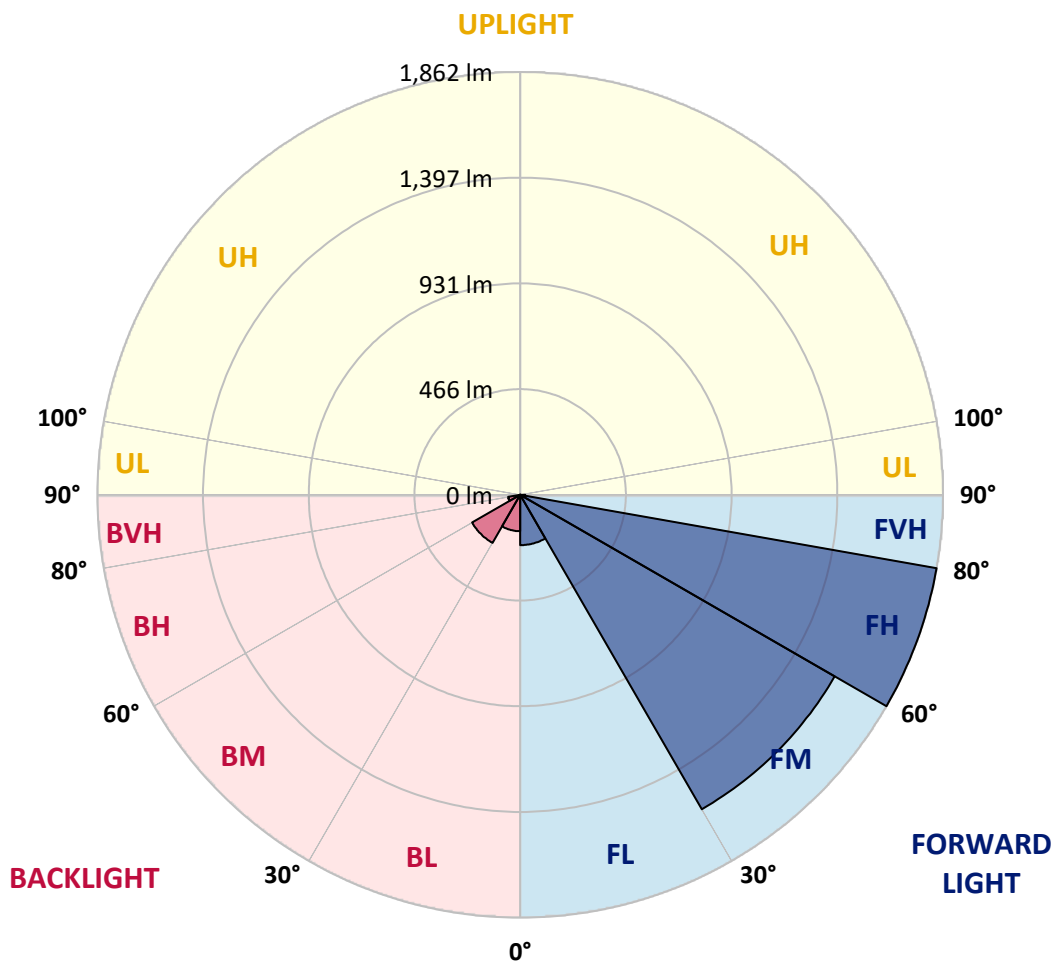
CATALOG NUMBER: ENT-SA1E-727-U-T4FT-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	221.7	5.3			
FM	(30°-60°)	1599.2	38.4			
FH	(60°-80°)	1862.1	44.7			G2/5000
FVH	(80°-90°)	22.3	0.5			G1/100
BL	(0°-30°)	160.2	3.8	B1/500		
BM	(30°-60°)	244.4	5.9	B1/1000		
BH	(60°-80°)	53.8	1.3	B0/110		G0/110
BVH	(80°-90°)	2.2	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-G2**

Type IV Short





REPORT NUMBER: P401625

CATALOG NUMBER: ENT-SA1E-727-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5
2.5°	587.8	580.3	587.0	590.3	592.8	596.2	601.2	610.4	620.4	632.1	638.8
5°	512.6	516.7	519.2	528.4	537.6	539.3	555.2	573.6	597.0	620.4	640.5
7.5°	451.5	451.5	459.0	473.3	488.3	490.0	517.6	541.8	575.3	611.2	643.8
10°	403.0	404.7	410.5	424.8	444.0	448.2	479.1	512.6	554.4	601.2	647.2
12.5°	387.1	386.3	385.5	395.5	411.4	415.6	449.8	490.0	539.3	596.2	655.5
15°	397.2	394.7	388.8	390.5	400.5	404.7	434.8	474.9	530.1	595.3	669.7
17.5°	413.1	409.7	398.8	395.5	406.4	410.5	435.6	470.7	526.8	599.5	686.5
20°	432.3	428.9	412.2	408.0	418.9	422.3	448.2	478.3	528.4	607.9	709.0
22.5°	459.9	455.7	431.4	426.4	437.3	440.6	468.2	495.8	538.5	622.9	740.0
25°	493.3	488.3	457.4	450.7	464.1	467.4	495.0	520.9	555.2	643.0	779.3
27.5°	530.1	524.3	491.6	478.3	493.3	498.3	524.3	552.7	579.4	668.1	831.1
30°	563.6	556.9	525.1	510.0	525.1	527.6	558.5	590.3	618.7	710.7	907.2
32.5°	656.4	639.6	590.3	546.8	556.9	561.9	599.5	649.7	692.3	761.7	1005.0
35°	795.2	781.8	721.6	646.3	611.2	612.9	661.4	724.9	744.2	821.1	1126.3
37.5°	929.0	917.2	864.6	795.2	728.3	730.8	739.1	800.2	822.8	923.9	1274.3
40°	1075.3	1056.9	1015.1	949.0	903.0	892.2	851.2	893.8	943.2	1053.5	1435.7
42.5°	1143.0	1125.4	1082.0	1086.1	1081.1	1061.9	980.8	1040.2	1095.3	1241.7	1613.7
45°	1255.0	1220.8	1131.3	1138.0	1131.3	1133.0	1153.0	1239.2	1286.8	1440.7	1815.3
47.5°	1358.7	1319.4	1225.8	1219.1	1248.4	1263.4	1371.3	1475.8	1480.0	1613.7	1973.3
50°	1453.2	1424.8	1338.7	1339.5	1393.0	1409.7	1625.5	1720.8	1636.3	1746.7	2097.0
52.5°	1578.6	1538.5	1461.6	1489.2	1572.8	1587.8	1878.8	1935.7	1749.2	1867.1	2194.0
55°	1694.9	1673.1	1616.3	1657.2	1785.2	1824.5	2136.3	2101.2	1828.6	1974.1	2240.9
57.5°	1885.5	1864.6	1849.5	1870.4	2041.9	2091.2	2397.2	2218.3	1890.5	2045.2	2219.1
60°	2203.2	2182.3	2137.2	2156.4	2379.7	2404.7	2602.1	2337.0	1914.8	2065.3	2133.8
62.5°	2595.4	2569.5	2496.7	2585.3	2809.4	2808.6	2814.4	2399.7	1883.8	2005.9	1908.9
65°	2949.1	2913.1	2875.5	3056.1	3328.7	3291.0	3040.2	2407.2	1786.0	1719.1	1476.6
67.5°	3206.6	3192.4	3213.3	3495.1	3788.5	3750.9	3259.3	2303.6	1486.7	1240.8	912.2
70°	3196.6	3167.3	3300.2	3750.1	4016.8	3985.9	3250.1	1893.0	991.7	657.2	382.1
71°	3023.5	2990.0	3192.4	3725.0	4030.2	4000.9	3133.0	1619.6	784.3	464.1	251.7
72.5°	2336.2	2437.3	2759.3	3456.6	3901.4	3863.8	2814.4	1240.0	496.7	268.4	126.3
75°	988.3	1043.5	1638.0	2467.4	2926.5	2907.3	1897.2	572.8	228.3	121.2	48.5
77.5°	254.2	250.8	501.7	1058.6	1704.1	1734.2	874.6	196.5	118.7	86.1	27.6
80°	49.3	53.5	143.0	367.9	650.5	668.1	285.1	86.1	79.4	67.7	14.2
82.5°	5.0	5.9	25.1	113.7	218.2	210.7	62.7	32.6	48.5	46.0	6.7
85°	0.0	0.0	0.8	0.8	0.8	0.8	0.8	3.3	11.7	12.5	1.7
87.5°	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P401625

CATALOG NUMBER: ENT-SA1E-727-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5	645.5
2.5°	643.8	651.4	659.7	665.6	671.4	672.3	680.6	678.9	681.5	682.3	681.5
5°	651.4	661.4	677.3	685.6	689.0	683.1	681.5	672.3	668.9	664.7	660.5
7.5°	659.7	672.3	690.7	694.8	683.1	661.4	643.8	621.3	600.3	587.0	588.6
10°	668.9	684.8	699.8	689.0	658.9	616.2	566.9	516.7	472.4	455.7	461.5
12.5°	680.6	699.8	706.5	676.4	617.9	531.8	442.3	366.2	320.2	292.6	289.3
15°	698.2	717.4	709.9	656.4	552.7	418.1	306.9	229.9	185.6	171.4	163.9
17.5°	719.9	738.3	709.9	620.4	459.9	299.3	186.5	139.6	125.4	122.1	122.9
20°	746.7	764.2	706.5	566.1	354.5	184.0	124.6	115.4	115.4	115.4	114.6
22.5°	782.6	791.8	701.5	494.2	244.2	124.6	110.4	109.5	110.4	110.4	110.4
25°	826.1	824.4	692.3	408.0	153.8	106.2	105.4	105.4	106.2	107.0	107.0
27.5°	883.8	866.2	676.4	305.2	108.7	98.7	100.3	102.0	103.7	105.4	105.4
30°	964.1	921.4	650.5	206.5	92.0	91.1	94.5	99.5	102.0	103.7	103.7
32.5°	1050.2	978.3	606.2	132.1	84.5	83.6	87.0	94.5	101.2	102.8	102.8
35°	1158.9	1039.3	540.1	95.3	79.4	77.8	81.1	87.8	97.8	102.8	102.8
37.5°	1273.4	1104.5	444.0	80.3	74.4	72.7	75.3	80.3	92.0	101.2	102.0
40°	1395.5	1162.2	333.6	74.4	69.4	68.6	69.4	74.4	83.6	96.2	98.7
42.5°	1518.4	1210.7	233.3	68.6	65.2	63.5	65.2	68.6	76.9	87.8	89.5
45°	1653.9	1264.2	155.5	63.5	61.9	60.2	61.9	64.4	70.2	76.1	76.9
47.5°	1752.5	1283.5	107.0	57.7	56.9	57.7	58.5	60.2	63.5	64.4	63.5
50°	1817.8	1273.4	76.9	51.8	52.7	55.2	55.2	56.0	56.0	53.5	52.7
52.5°	1865.4	1236.6	59.4	44.3	49.3	51.8	51.8	50.2	48.5	45.2	44.3
55°	1870.4	1153.9	46.8	38.5	44.3	48.5	47.7	44.3	41.0	37.6	37.6
57.5°	1806.9	1028.5	38.5	32.6	38.5	42.6	41.0	37.6	33.4	30.9	30.9
60°	1704.1	899.7	32.6	27.6	31.8	36.0	33.4	30.9	26.8	24.2	24.2
62.5°	1514.2	772.6	26.8	22.6	25.9	28.4	27.6	25.1	20.9	19.2	18.4
65°	1160.6	587.8	20.1	17.6	20.1	23.4	21.7	19.2	16.7	14.2	13.4
67.5°	697.3	353.7	15.9	13.4	15.9	18.4	16.7	14.2	11.7	10.0	10.0
70°	295.2	151.3	12.5	10.0	11.7	14.2	13.4	11.7	9.2	8.4	8.4
71°	200.7	107.9	10.9	9.2	10.9	13.4	12.5	10.9	9.2	8.4	8.4
72.5°	102.8	55.2	9.2	7.5	10.0	11.7	11.7	10.0	8.4	8.4	8.4
75°	36.8	23.4	7.5	6.7	8.4	8.4	9.2	9.2	9.2	9.2	8.4
77.5°	20.9	14.2	6.7	6.7	6.7	7.5	9.2	10.0	10.9	10.9	10.0
80°	11.7	7.5	4.2	5.0	6.7	7.5	9.2	10.0	11.7	11.7	10.9
82.5°	5.9	2.5	0.8	2.5	4.2	6.7	7.5	8.4	10.0	9.2	9.2
85°	0.8	0.0	0.0	0.8	2.5	3.3	5.0	6.7	8.4	8.4	7.5
87.5°	0.0	0.0	0.0	0.0	0.8	1.7	2.5	4.2	5.9	6.7	5.9
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)