

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: P401659

Luminaire Tested: **ENV-SA1E-735-U-T3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401659  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1E-735-U-T3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5077 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full 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

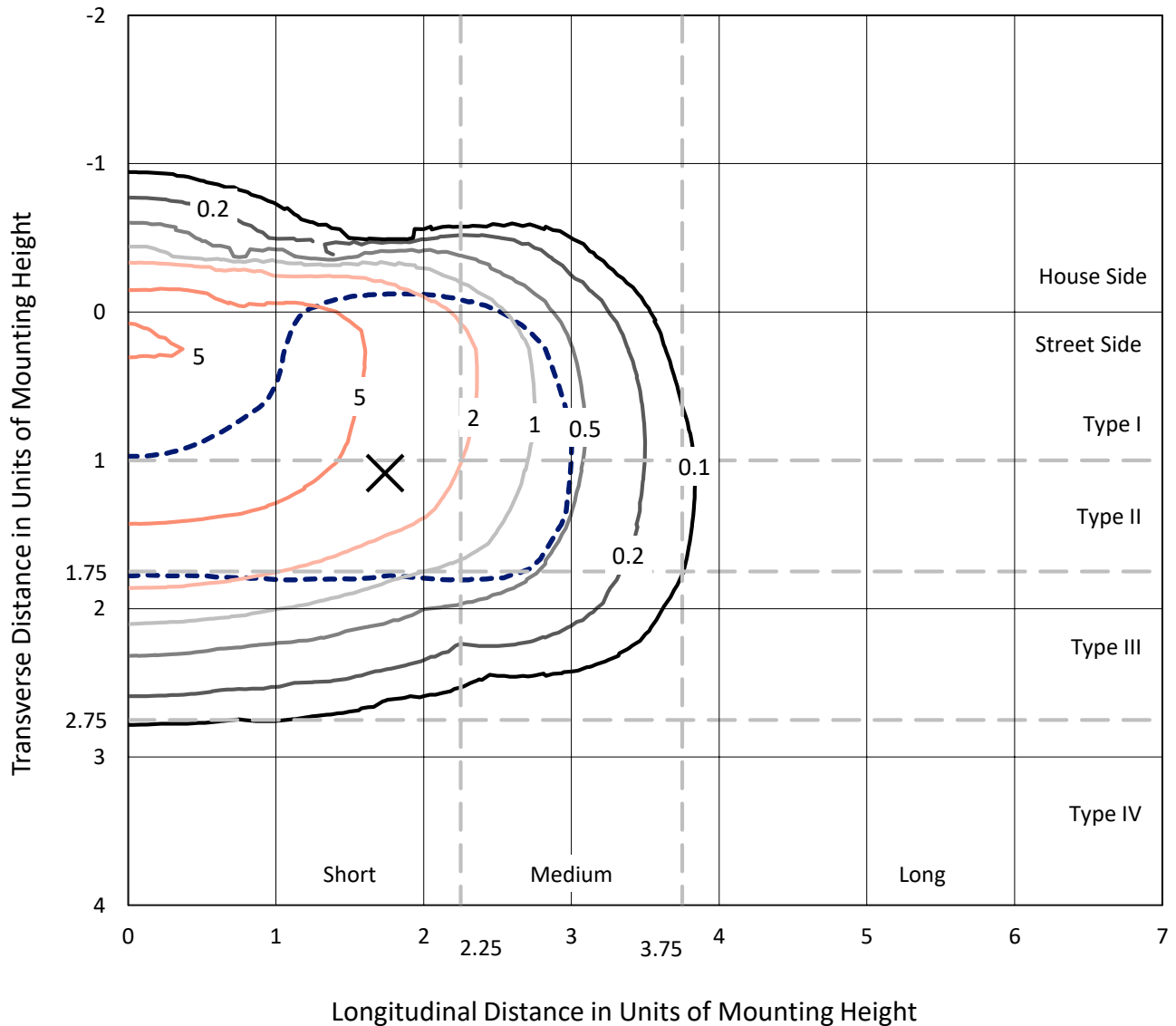


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

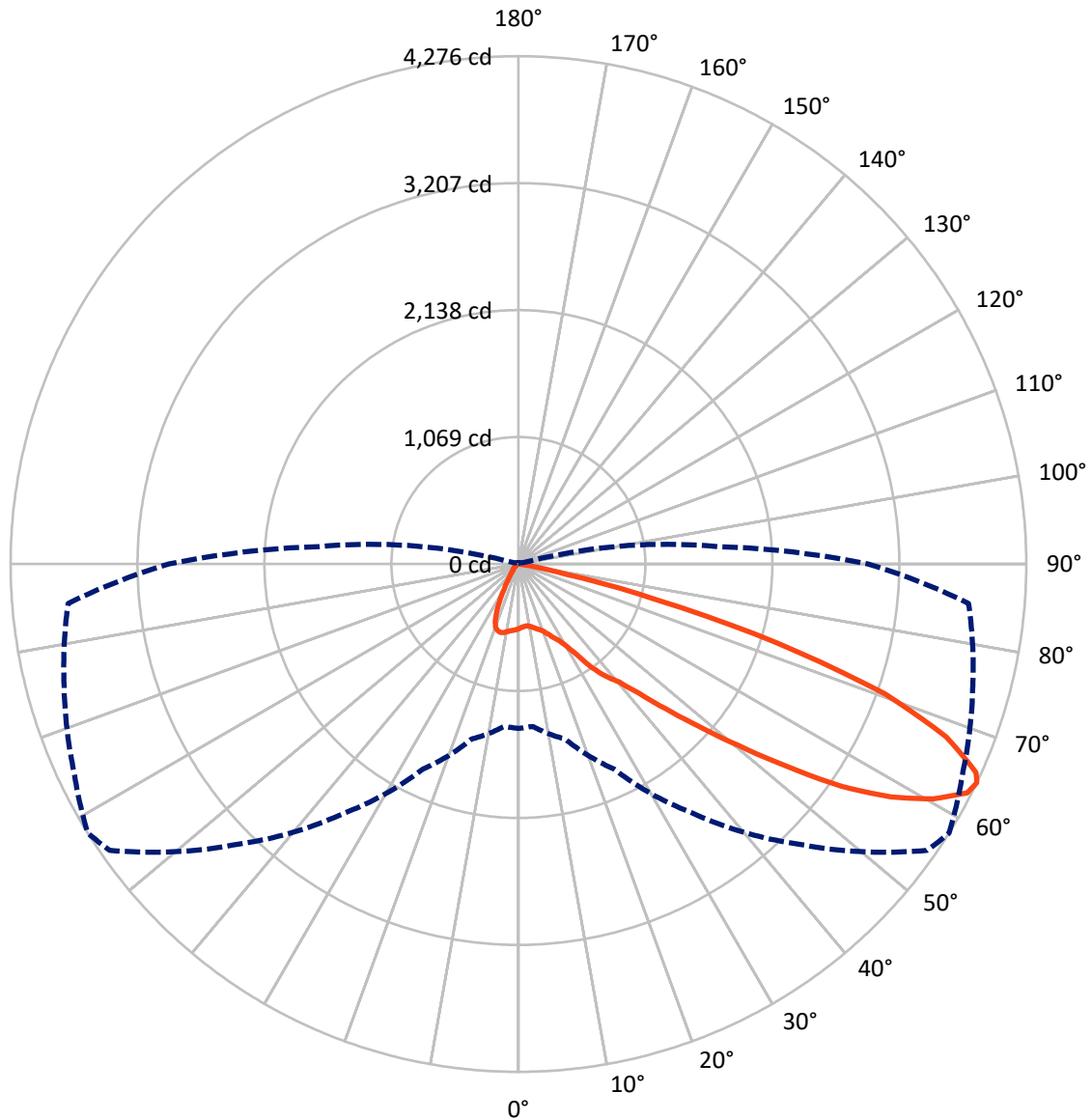


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 64-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	605.3	0.0	605.3
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	4471.7	0.0	4471.7
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	5077.0	0.0	5077.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.4	1.0
10°-20°	149.8	3.0
20°-30°	269.2	5.3
30°-40°	471.8	9.3
40°-50°	862.7	17.0
50°-60°	1475.8	29.1
60°-70°	1431.6	28.2
70°-80°	354.6	7.0
80°-90°	10.1	0.2
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°	5077.0	100.0
0°-180°	5077.0	100.0



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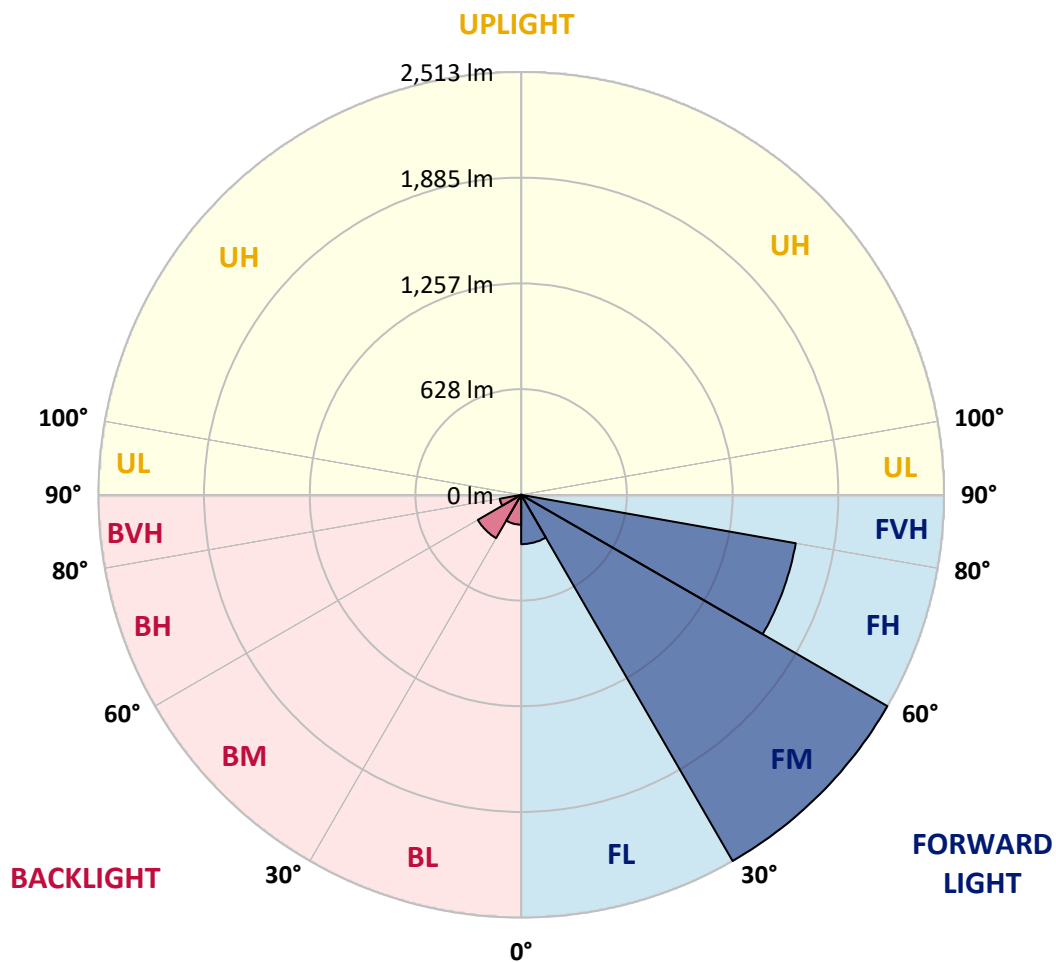
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	293.1	5.8			
FM	(30°-60°)	2513.0	49.5			
FH	(60°-80°)	1657.0	32.6			G1/1800
FVH	(80°-90°)	8.6	0.2			G0/10
BL	(0°-30°)	177.2	3.5	B1/500		
BM	(30°-60°)	297.3	5.9	B1/1000		
BH	(60°-80°)	129.2	2.5	B1/500		G1/500
BVH	(80°-90°)	1.5	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°	58°	65°	75°	85°
0°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8
2.5°	521.3	521.3	523.2	524.1	526.9	529.7	533.5	534.4	536.3	541.0	542.9
5°	493.1	494.1	495.9	500.6	507.2	514.7	524.1	526.9	534.4	543.8	550.4
7.5°	481.8	482.8	485.6	491.2	499.7	511.0	522.2	526.0	536.3	551.3	560.7
10°	480.0	480.0	483.7	492.2	502.5	516.6	528.8	533.5	547.6	565.4	580.5
12.5°	480.0	480.0	484.7	495.0	507.2	525.0	542.0	548.5	564.5	587.0	605.8
15°	488.4	490.3	493.1	499.7	513.8	533.5	557.0	564.5	584.2	611.5	634.9
17.5°	548.5	546.6	537.3	528.8	526.0	542.9	571.1	581.4	610.5	645.3	670.6
20°	665.0	664.1	647.1	605.8	569.2	559.8	592.7	604.9	647.1	693.2	712.0
22.5°	805.9	810.6	784.3	728.9	653.7	605.8	624.6	641.5	696.0	751.4	762.7
25°	945.8	951.5	927.0	857.5	765.5	681.9	668.8	683.8	745.8	801.2	796.5
27.5°	1111.1	1106.4	1082.0	1003.1	896.1	784.3	727.9	730.7	778.6	840.6	825.6
30°	1232.3	1225.7	1202.3	1148.7	1048.2	920.5	812.5	804.0	818.1	886.7	870.7
32.5°	1343.1	1347.8	1330.0	1258.6	1163.7	1060.4	939.3	916.7	911.1	969.3	943.0
35°	1453.0	1452.1	1445.5	1382.6	1289.6	1191.9	1090.5	1074.5	1072.6	1129.0	1057.6
37.5°	1584.5	1578.0	1565.7	1501.9	1427.7	1334.7	1226.7	1201.3	1196.6	1207.9	1124.3
40°	1725.4	1733.9	1714.1	1647.5	1566.7	1497.2	1346.0	1307.4	1275.5	1308.4	1254.8
42.5°	1934.9	1941.4	1906.7	1860.7	1756.4	1691.6	1538.5	1485.9	1470.9	1520.7	1460.5
45°	2197.9	2185.7	2162.2	2130.2	2043.8	1945.2	1785.5	1735.7	1719.8	1805.3	1706.6
47.5°	2402.6	2400.7	2401.7	2395.1	2382.0	2263.6	2073.9	2040.1	2024.1	2147.1	2038.2
50°	2532.2	2539.8	2571.7	2653.4	2713.5	2663.7	2441.1	2399.8	2387.6	2515.3	2367.9
52.5°	2629.9	2647.8	2701.3	2862.9	3055.4	3072.3	2888.2	2830.0	2801.8	2837.5	2632.7
55°	2679.7	2688.2	2769.9	3008.4	3309.9	3431.1	3354.1	3305.3	3191.6	3124.0	2943.6
57.5°	2563.2	2550.1	2691.0	2994.4	3441.4	3720.4	3753.3	3697.9	3515.6	3463.0	3321.2
60°	2258.0	2252.3	2411.1	2775.5	3326.9	3788.0	4049.1	4014.4	3847.2	3722.3	3588.9
62.5°	1722.6	1732.0	1900.1	2271.1	2918.3	3593.6	4213.5	4241.7	4064.2	3878.2	3787.1
64°	1383.5	1372.3	1526.3	1903.9	2560.4	3334.4	4201.3	4275.5	4129.9	3959.9	3804.9
65°	1161.9	1137.4	1284.9	1626.8	2258.0	3146.5	4114.9	4234.2	4134.6	3979.6	3740.1
67.5°	611.5	624.6	687.5	988.1	1524.4	2379.1	3705.4	3885.7	3926.1	3710.1	3259.2
70°	274.3	276.1	316.5	504.4	843.5	1543.2	2980.3	3272.4	3294.9	3047.9	2361.3
72.5°	91.1	92.0	139.9	201.9	354.1	714.8	2012.8	2278.6	2327.5	1976.2	1281.1
75°	56.4	58.2	74.2	109.0	164.4	249.8	1020.0	1200.4	1210.7	876.3	465.9
77.5°	35.7	37.6	45.1	64.8	90.2	94.9	334.4	404.8	458.4	315.6	144.6
80°	22.5	22.5	29.1	39.4	47.0	40.4	91.1	120.2	144.6	106.1	48.8
82.5°	8.5	8.5	15.0	21.6	19.7	14.1	24.4	31.9	55.4	52.6	23.5
85°	0.0	0.0	0.9	1.9	0.9	1.9	4.7	6.6	10.3	15.0	7.5
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	1.9	1.9	1.9	1.9	1.9
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°	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8	543.8
2.5°	545.7	547.6	551.3	552.3	553.2	550.4	553.2	550.4	552.3	552.3	552.3
5°	554.2	557.0	559.8	560.7	559.8	553.2	555.1	550.4	549.5	549.5	549.5
7.5°	565.4	568.3	572.9	570.1	564.5	555.1	554.2	547.6	544.8	544.8	545.7
10°	586.1	588.9	590.8	585.2	573.9	559.8	549.5	535.4	528.8	526.0	526.0
12.5°	612.4	615.2	614.3	604.9	584.2	555.1	526.0	498.7	479.0	471.5	464.0
15°	640.6	644.3	642.5	622.7	583.3	531.6	475.3	411.4	371.9	346.6	341.9
17.5°	673.4	677.2	667.8	632.1	569.2	481.8	374.8	288.4	231.1	209.5	208.5
20°	713.8	712.0	689.4	633.1	543.8	389.8	250.8	180.3	155.9	150.3	149.3
22.5°	759.9	751.4	710.1	627.4	474.3	264.9	161.6	142.8	139.9	138.1	138.1
25°	786.2	771.1	717.6	611.5	365.4	169.1	137.1	133.4	129.6	125.9	124.9
27.5°	806.8	784.3	720.4	558.9	243.3	129.6	124.0	120.2	114.6	109.0	108.0
30°	844.4	810.6	725.1	466.8	149.3	110.8	108.0	101.4	93.0	87.4	85.5
32.5°	912.0	863.2	743.9	349.4	109.0	97.7	90.2	81.7	72.3	66.7	66.7
35°	984.3	913.0	753.3	230.1	94.9	85.5	74.2	63.9	55.4	50.7	49.8
37.5°	1051.0	984.3	750.5	140.9	84.5	73.3	61.1	50.7	43.2	39.4	39.4
40°	1187.2	1109.3	712.0	96.7	74.2	62.0	49.8	39.4	34.8	31.9	31.9
42.5°	1381.6	1246.4	626.5	82.7	64.8	51.7	39.4	32.9	29.1	26.3	26.3
45°	1599.6	1397.6	499.7	74.2	56.4	43.2	32.9	27.2	23.5	22.5	22.5
47.5°	1885.1	1580.8	367.3	66.7	48.8	36.6	27.2	22.5	20.7	19.7	19.7
50°	2134.9	1729.2	250.8	58.2	43.2	31.0	23.5	20.7	18.8	17.8	17.8
52.5°	2362.2	1832.5	165.3	50.7	38.5	25.4	21.6	18.8	17.8	16.9	16.9
55°	2629.9	1911.4	111.8	44.1	33.8	23.5	20.7	18.8	16.9	16.9	16.0
57.5°	2857.2	1958.4	79.8	37.6	30.1	21.6	19.7	17.8	16.0	15.0	15.0
60°	2989.7	1902.9	58.2	32.9	26.3	19.7	17.8	16.0	15.0	14.1	14.1
62.5°	3026.3	1795.9	45.1	28.2	22.5	17.8	16.0	14.1	13.1	12.2	12.2
64°	2941.8	1681.3	38.5	24.4	19.7	16.0	15.0	13.1	11.3	9.4	9.4
65°	2822.5	1575.1	34.8	22.5	17.8	15.0	14.1	12.2	9.4	7.5	7.5
67.5°	2351.9	1255.8	28.2	18.8	14.1	13.1	11.3	9.4	6.6	4.7	4.7
70°	1670.0	878.2	21.6	15.0	12.2	12.2	10.3	7.5	3.8	1.9	1.9
72.5°	883.8	456.5	17.8	12.2	9.4	9.4	8.5	4.7	2.8	1.9	0.9
75°	309.0	150.3	15.0	10.3	8.5	6.6	5.6	3.8	2.8	1.9	0.9
77.5°	93.9	49.8	13.1	10.3	7.5	5.6	6.6	5.6	5.6	3.8	2.8
80°	30.1	17.8	7.5	6.6	7.5	7.5	6.6	5.6	6.6	4.7	3.8
82.5°	11.3	6.6	2.8	3.8	3.8	4.7	4.7	3.8	2.8	0.9	0.0
85°	3.8	2.8	1.9	2.8	2.8	2.8	1.9	1.9	0.9	0.0	0.0
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	0.9	0.9	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

(END OF REPORT)