

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: P401839

Luminaire Tested: **ENT-SA1F-735-U-T3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401839  
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: ENT-SA1F-735-U-T3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 1200mA 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: 5620 lumens  
Efficiency: N/A  
Efficacy: 85.0 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 - G2

Input Watts (W): 66.1  
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

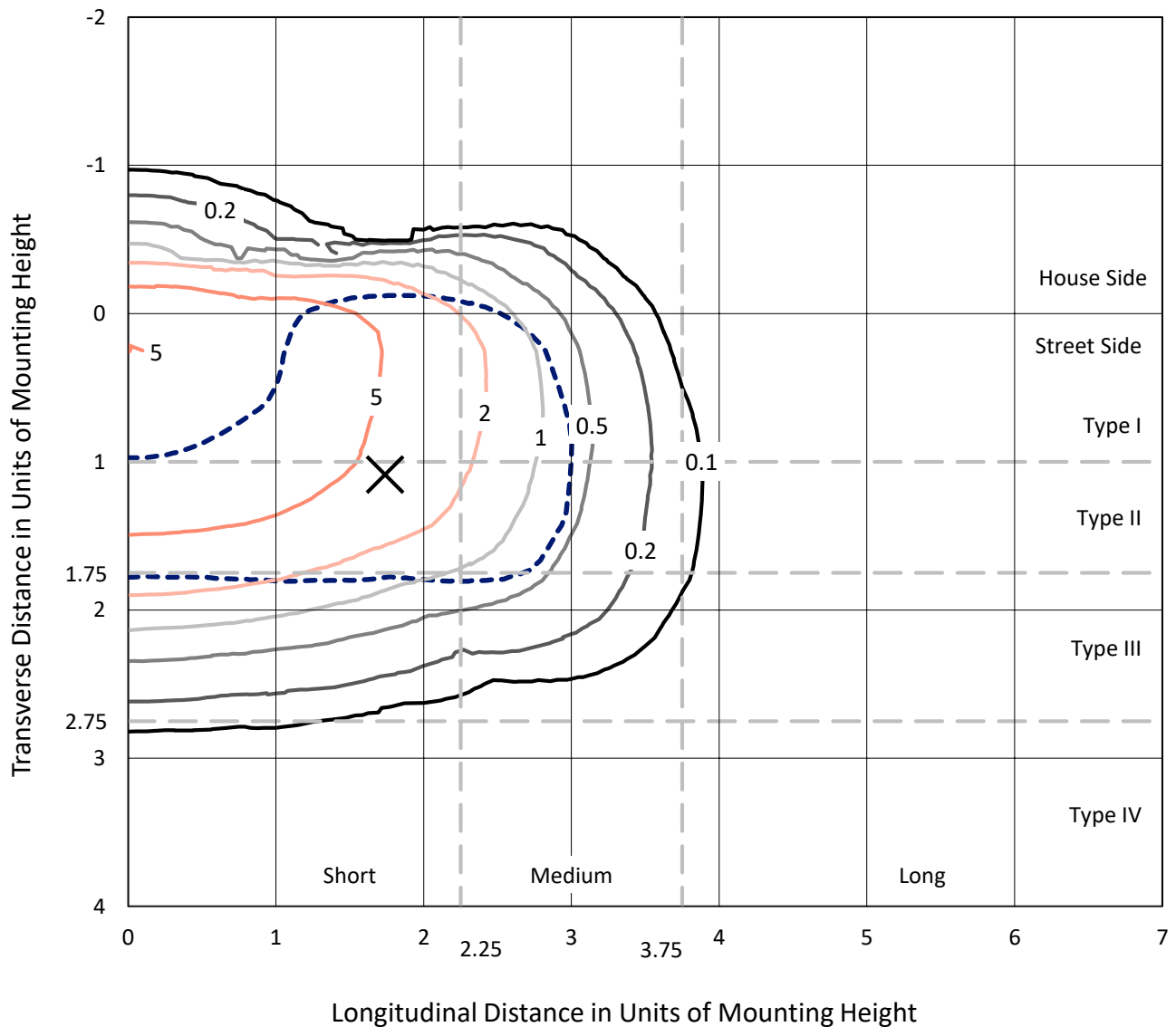


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

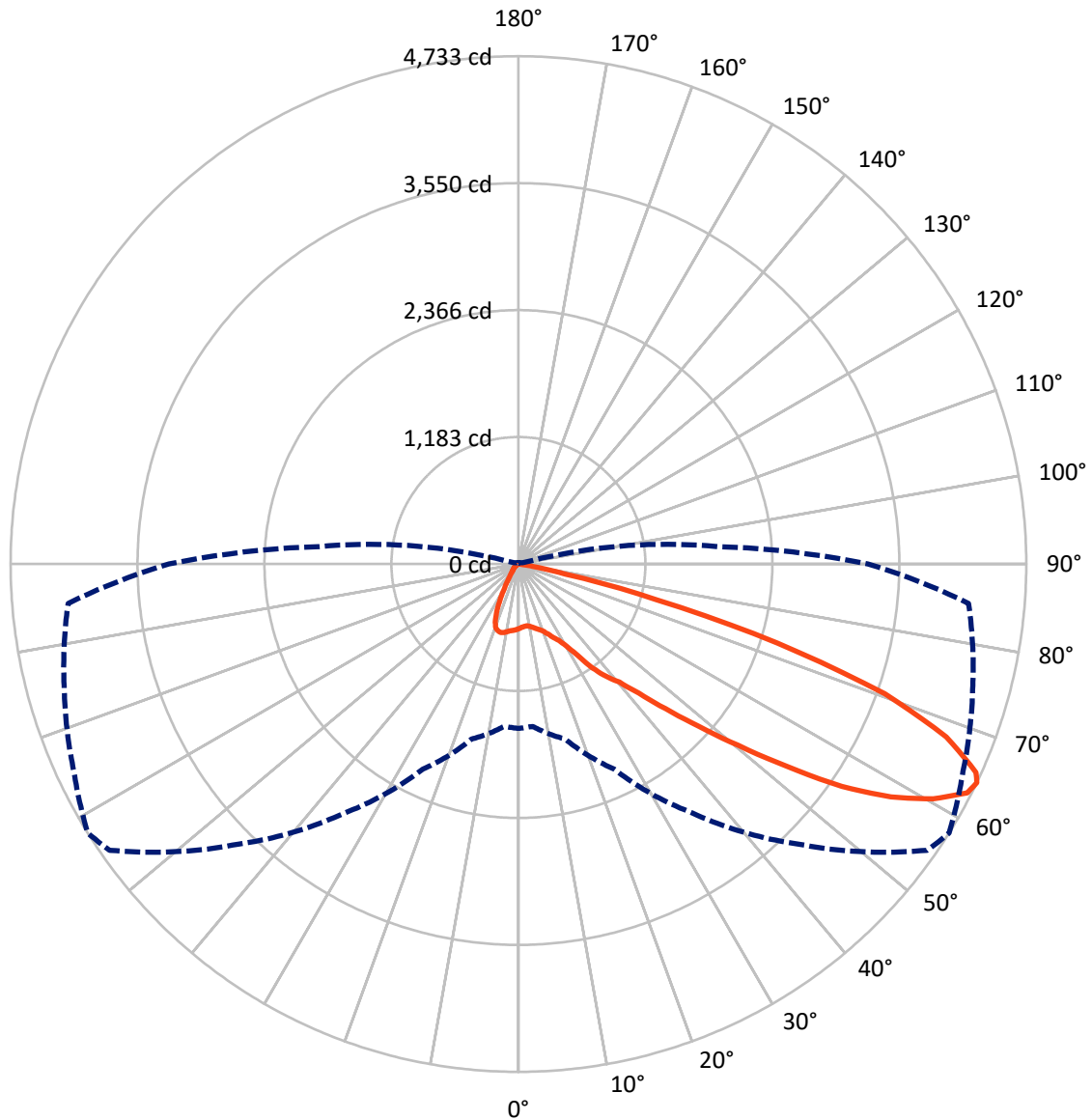


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc  
 Type III - Short - Full Cutoff

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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	670.0	0.0	670.0
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	4950.0	0.0	4950.0
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	5620.0	0.0	5620.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.9	1.0
10°-20°	165.8	3.0
20°-30°	298.0	5.3
30°-40°	522.3	9.3
40°-50°	954.9	17.0
50°-60°	1633.6	29.1
60°-70°	1584.8	28.2
70°-80°	392.5	7.0
80°-90°	11.2	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°	5620.0	100.0
0°-180°	5620.0	100.0



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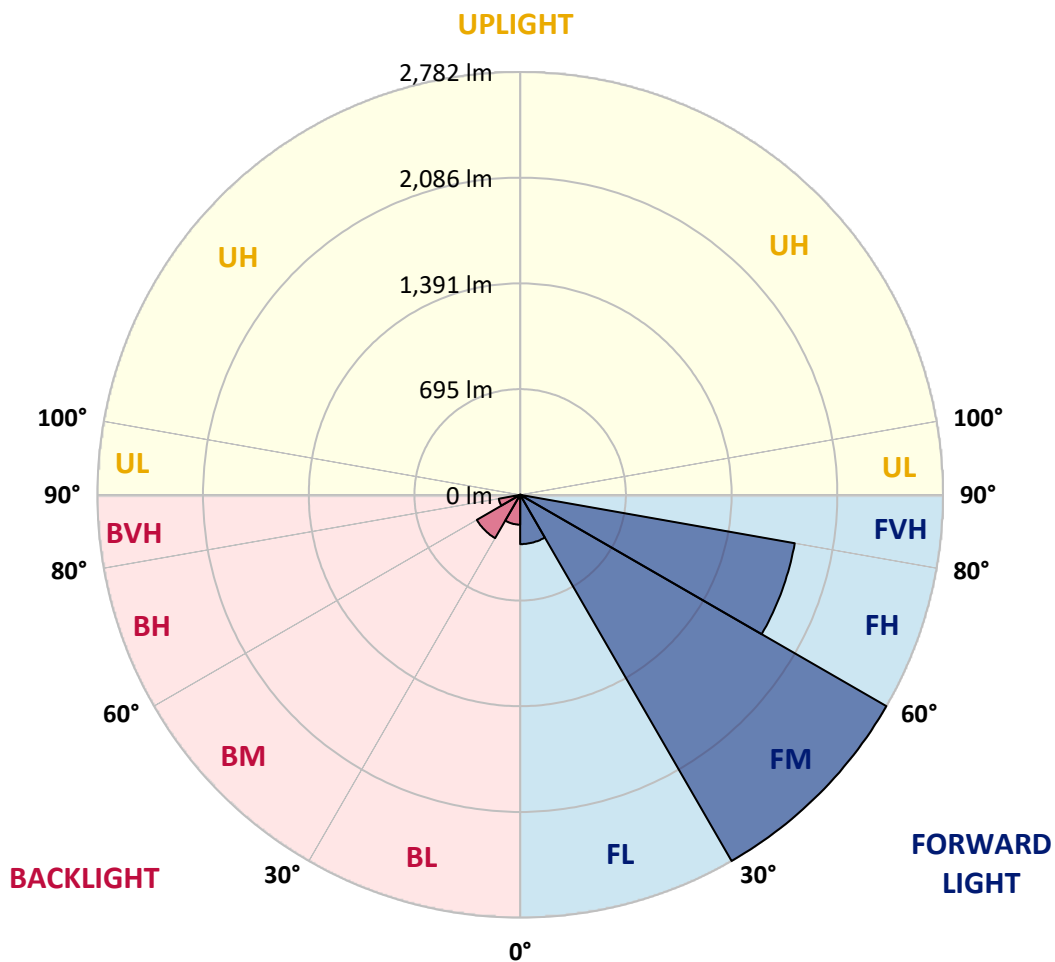
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	324.5	5.8			
FM (30°-60°)	2781.8	49.5			
FH (60°-80°)	1834.2	32.6			G2/5000
FVH (80°-90°)	9.5	0.2			G0/10
BL (0°-30°)	196.2	3.5	B1/500		
BM (30°-60°)	329.1	5.9	B1/1000		
BH (60°-80°)	143.1	2.5	B1/500		G1/500
BVH (80°-90°)	1.7	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0
2.5°	577.0	577.0	579.1	580.2	583.3	586.4	590.6	591.6	593.7	598.9	601.0
5°	545.9	546.9	549.0	554.2	561.4	569.8	580.2	583.3	591.6	602.0	609.3
7.5°	533.4	534.4	537.5	543.8	553.1	565.6	578.1	582.2	593.7	610.3	620.7
10°	531.3	531.3	535.5	544.8	556.2	571.8	585.4	590.6	606.2	625.9	642.5
12.5°	531.3	531.3	536.5	547.9	561.4	581.2	599.9	607.2	624.9	649.8	670.6
15°	540.7	542.7	545.9	553.1	568.7	590.6	616.6	624.9	646.7	676.9	702.8
17.5°	607.2	605.1	594.7	585.4	582.2	601.0	632.1	643.6	675.8	714.3	742.4
20°	736.1	735.1	716.4	670.6	630.1	619.7	656.1	669.6	716.4	767.3	788.1
22.5°	892.1	897.3	868.2	806.8	723.6	670.6	691.4	710.1	770.4	831.8	844.2
25°	1047.0	1053.2	1026.2	949.3	847.4	754.8	740.3	756.9	825.5	886.9	881.7
27.5°	1230.0	1224.8	1197.8	1110.4	991.9	868.2	805.8	808.9	861.9	930.5	913.9
30°	1364.1	1356.8	1330.8	1271.6	1160.3	1018.9	899.4	890.0	905.6	981.5	963.8
32.5°	1486.8	1492.0	1472.2	1393.2	1288.2	1173.8	1039.7	1014.8	1008.5	1073.0	1043.9
35°	1608.4	1607.4	1600.1	1530.5	1427.5	1319.4	1207.1	1189.4	1187.4	1249.7	1170.7
37.5°	1754.0	1746.7	1733.2	1662.5	1580.4	1477.4	1357.9	1329.8	1324.6	1337.1	1244.5
40°	1910.0	1919.3	1897.5	1823.7	1734.2	1657.3	1489.9	1447.3	1411.9	1448.3	1389.1
42.5°	2141.8	2149.1	2110.6	2059.7	1944.3	1872.5	1703.1	1644.8	1628.2	1683.3	1616.8
45°	2432.9	2419.4	2393.4	2358.1	2262.4	2153.2	1976.5	1921.4	1903.7	1998.3	1889.2
47.5°	2659.6	2657.5	2658.6	2651.3	2636.7	2505.7	2295.7	2258.3	2240.6	2376.8	2256.2
50°	2803.1	2811.4	2846.7	2937.2	3003.7	2948.6	2702.2	2656.5	2643.0	2784.4	2621.1
52.5°	2911.2	2931.0	2990.2	3169.1	3382.2	3400.9	3197.1	3132.7	3101.5	3141.0	2914.3
55°	2966.3	2975.7	3066.1	3330.2	3664.0	3798.1	3712.8	3658.8	3533.0	3458.1	3258.5
57.5°	2837.4	2822.8	2978.8	3314.6	3809.5	4118.3	4154.7	4093.4	3891.7	3833.4	3676.4
60°	2499.5	2493.2	2668.9	3072.4	3682.7	4193.2	4482.2	4443.7	4258.7	4120.4	3972.8
62.5°	1906.8	1917.2	2103.3	2514.0	3230.4	3977.9	4664.2	4695.4	4498.8	4293.0	4192.1
64°	1531.5	1519.0	1689.5	2107.5	2834.3	3691.0	4650.6	4732.8	4571.6	4383.4	4211.9
65°	1286.1	1259.1	1422.3	1800.8	2499.5	3483.0	4555.0	4687.0	4576.8	4405.3	4140.1
67.5°	676.9	691.4	761.1	1093.8	1687.5	2633.6	4101.7	4301.3	4346.0	4106.9	3607.8
70°	303.6	305.7	350.4	558.3	933.7	1708.3	3299.0	3622.4	3647.3	3373.9	2613.8
72.5°	100.9	101.9	154.9	223.5	392.0	791.2	2228.1	2522.3	2576.4	2187.6	1418.2
75°	62.4	64.5	82.1	120.6	182.0	276.6	1129.1	1328.8	1340.2	970.1	515.7
77.5°	39.5	41.6	49.9	71.7	99.8	105.0	370.1	448.1	507.4	349.3	160.1
80°	25.0	25.0	32.2	43.7	52.0	44.7	100.9	133.1	160.1	117.5	54.1
82.5°	9.4	9.4	16.6	23.9	21.8	15.6	27.0	35.4	61.3	58.2	26.0
85°	0.0	0.0	1.0	2.1	1.0	2.1	5.2	7.3	11.4	16.6	8.3
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	2.1	2.1	2.1	2.1	2.1
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°	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0
2.5°	604.1	606.2	610.3	611.4	612.4	609.3	612.4	609.3	611.4	611.4	611.4
5°	613.4	616.6	619.7	620.7	619.7	612.4	614.5	609.3	608.2	608.2	608.2
7.5°	625.9	629.0	634.2	631.1	624.9	614.5	613.4	606.2	603.0	603.0	604.1
10°	648.8	651.9	654.0	647.7	635.3	619.7	608.2	592.6	585.4	582.2	582.2
12.5°	677.9	681.0	680.0	669.6	646.7	614.5	582.2	552.1	530.3	521.9	513.6
15°	709.1	713.2	711.2	689.3	645.7	588.5	526.1	455.4	411.7	383.7	378.5
17.5°	745.5	749.6	739.2	699.7	630.1	533.4	414.8	319.2	255.8	231.9	230.8
20°	790.2	788.1	763.2	700.8	602.0	431.5	277.6	199.6	172.6	166.4	165.3
22.5°	841.1	831.8	786.0	694.5	525.1	293.2	178.8	158.0	154.9	152.8	152.8
25°	870.2	853.6	794.3	676.9	404.4	187.1	151.8	147.6	143.5	139.3	138.3
27.5°	893.1	868.2	797.5	618.6	269.3	143.5	137.2	133.1	126.8	120.6	119.6
30°	934.7	897.3	802.7	516.7	165.3	122.7	119.6	112.3	102.9	96.7	94.6
32.5°	1009.6	955.5	823.5	386.8	120.6	108.1	99.8	90.5	80.1	73.8	73.8
35°	1089.6	1010.6	833.9	254.7	105.0	94.6	82.1	70.7	61.3	56.1	55.1
37.5°	1163.4	1089.6	830.7	156.0	93.6	81.1	67.6	56.1	47.8	43.7	43.7
40°	1314.2	1227.9	788.1	107.1	82.1	68.6	55.1	43.7	38.5	35.4	35.4
42.5°	1529.4	1379.7	693.5	91.5	71.7	57.2	43.7	36.4	32.2	29.1	29.1
45°	1770.6	1547.1	553.1	82.1	62.4	47.8	36.4	30.2	26.0	25.0	25.0
47.5°	2086.7	1749.8	406.5	73.8	54.1	40.5	30.2	25.0	22.9	21.8	21.8
50°	2363.3	1914.1	277.6	64.5	47.8	34.3	26.0	22.9	20.8	19.8	19.8
52.5°	2614.9	2028.5	183.0	56.1	42.6	28.1	23.9	20.8	19.8	18.7	18.7
55°	2911.2	2115.8	123.7	48.9	37.4	26.0	22.9	20.8	18.7	18.7	17.7
57.5°	3162.8	2167.8	88.4	41.6	33.3	23.9	21.8	19.8	17.7	16.6	16.6
60°	3309.4	2106.5	64.5	36.4	29.1	21.8	19.8	17.7	16.6	15.6	15.6
62.5°	3350.0	1987.9	49.9	31.2	25.0	19.8	17.7	15.6	14.6	13.5	13.5
64°	3256.4	1861.1	42.6	27.0	21.8	17.7	16.6	14.6	12.5	10.4	10.4
65°	3124.3	1743.6	38.5	25.0	19.8	16.6	15.6	13.5	10.4	8.3	8.3
67.5°	2603.4	1390.1	31.2	20.8	15.6	14.6	12.5	10.4	7.3	5.2	5.2
70°	1848.6	972.1	23.9	16.6	13.5	13.5	11.4	8.3	4.2	2.1	2.1
72.5°	978.4	505.3	19.8	13.5	10.4	10.4	9.4	5.2	3.1	2.1	1.0
75°	342.1	166.4	16.6	11.4	9.4	7.3	6.2	4.2	3.1	2.1	1.0
77.5°	104.0	55.1	14.6	11.4	8.3	6.2	7.3	6.2	6.2	4.2	3.1
80°	33.3	19.8	8.3	7.3	8.3	8.3	7.3	6.2	7.3	5.2	4.2
82.5°	12.5	7.3	3.1	4.2	4.2	5.2	5.2	4.2	3.1	1.0	0.0
85°	4.2	3.1	2.1	3.1	3.1	3.1	2.1	2.1	1.0	0.0	0.0
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	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

(END OF REPORT)