

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: P401395

Luminaire Tested: **ENT-SA1C-830-U-SL2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401395  
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-SA1C-830-U-SL2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 3000K, 615mA 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: 2898 lumens  
Efficiency: N/A  
Efficacy: 87.0 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): 33.3  
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

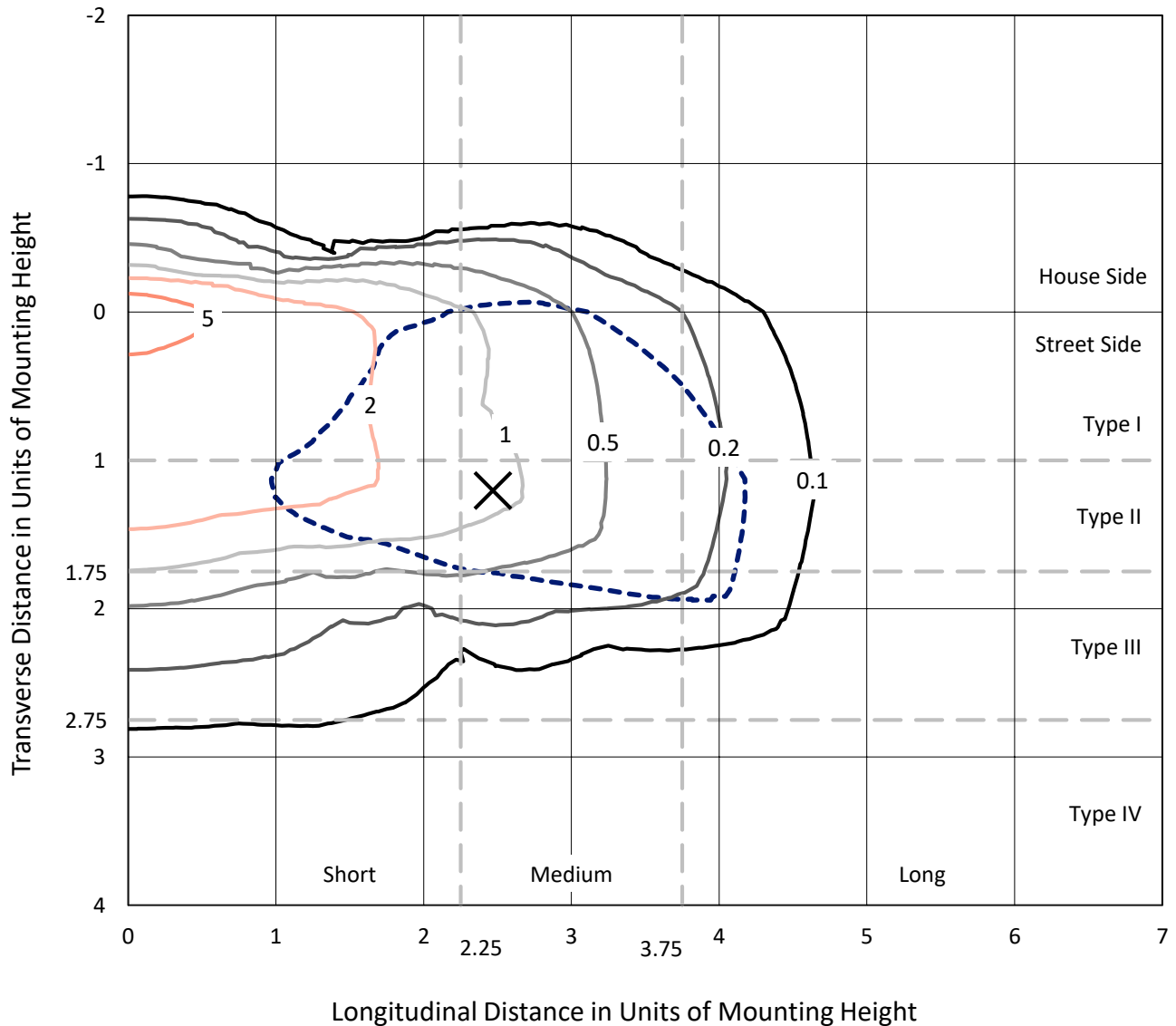


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### Iso-Footcandle Lines of Horizontal Illumination

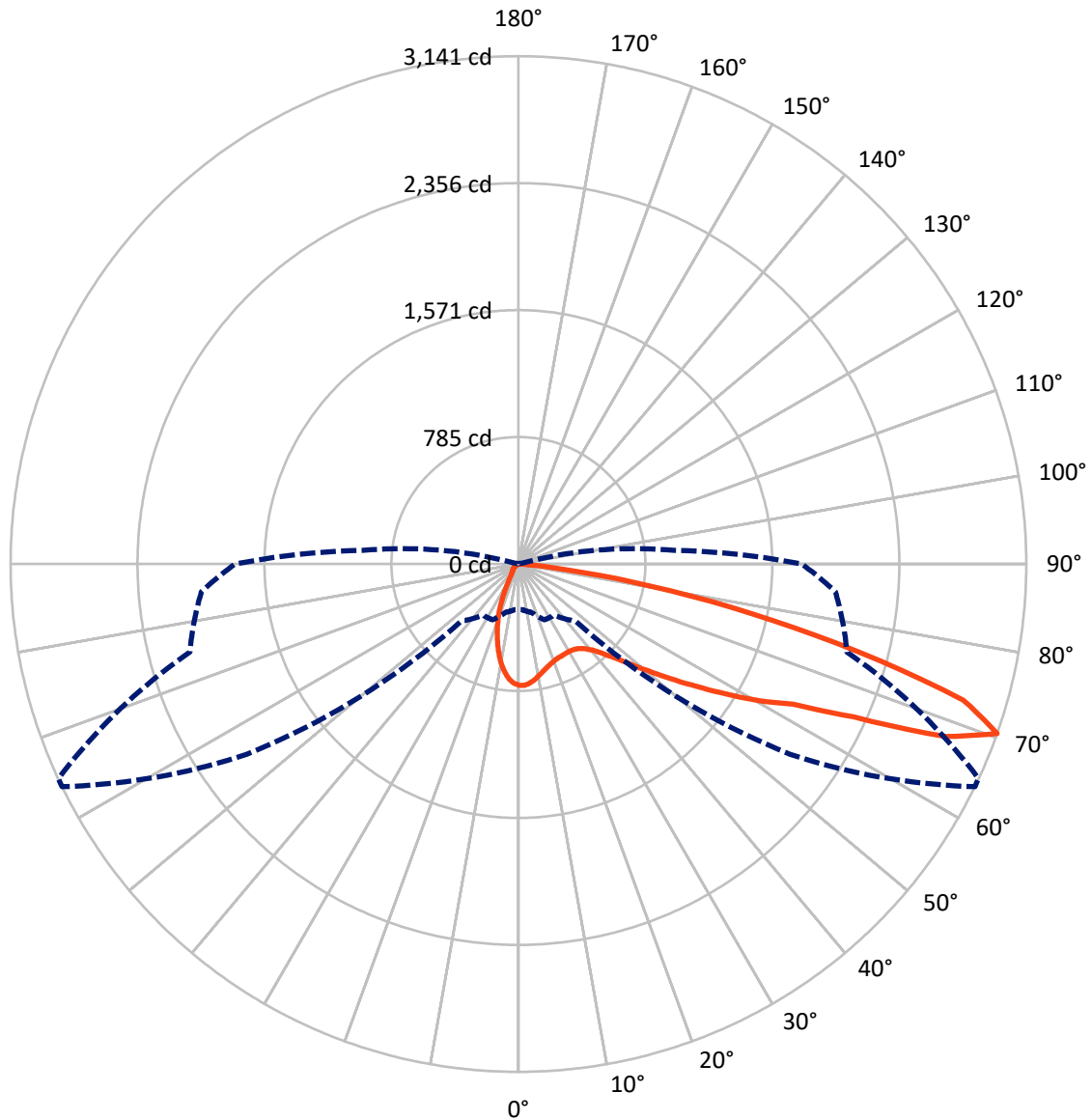
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.5 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	372.3	0.0	372.3
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	2525.7	0.0	2525.7
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	2898.0	0.0	2898.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.2	2.2
10°-20°	140.3	4.8
20°-30°	193.2	6.7
30°-40°	266.0	9.2
40°-50°	396.5	13.7
50°-60°	626.4	21.6
60°-70°	709.8	24.5
70°-80°	466.0	16.1
80°-90°	36.5	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°	2898.0	100.0
0°-180°	2898.0	100.0



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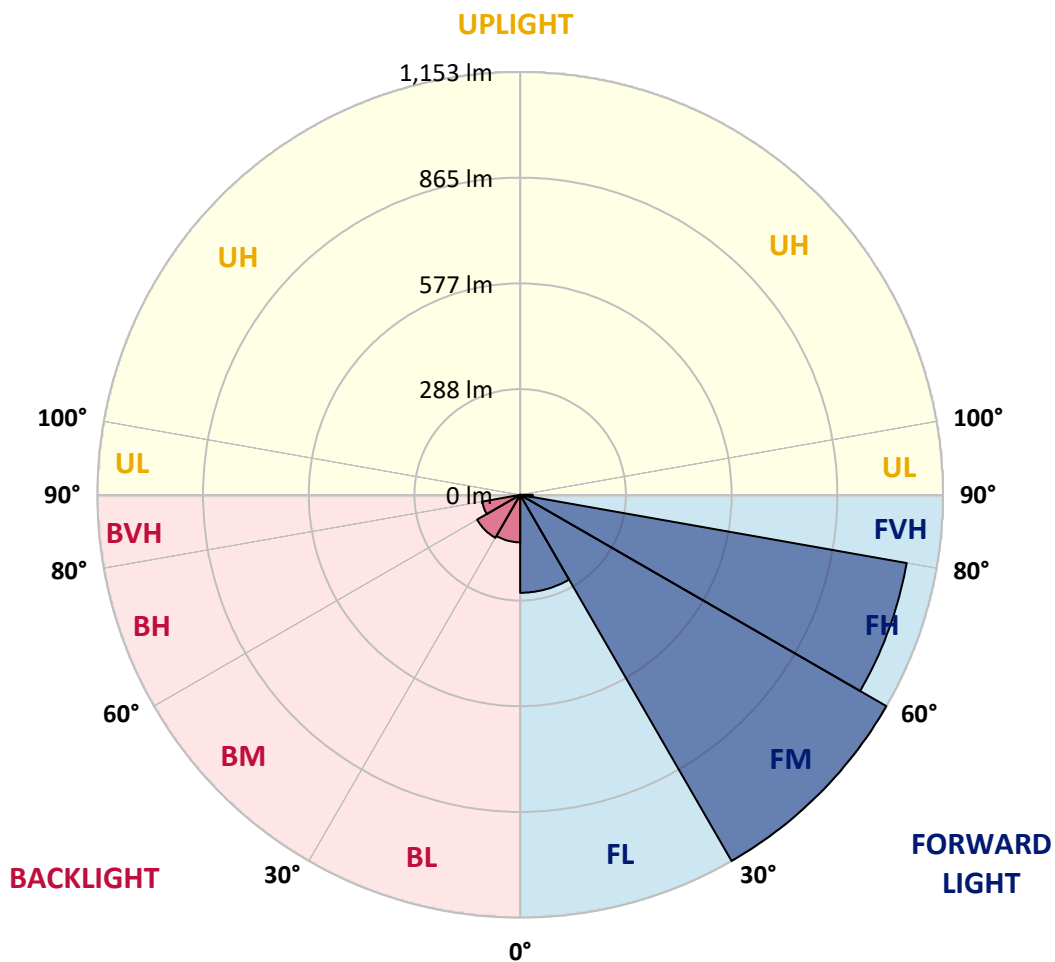
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	267.1	9.2			
FM	(30°-60°)	1153.4	39.8			
FH	(60°-80°)	1070.7	36.9			G1/1800
FVH	(80°-90°)	34.5	1.2			G1/100
BL	(0°-30°)	129.6	4.5	B1/500		
BM	(30°-60°)	135.6	4.7	B0/220		
BH	(60°-80°)	105.1	3.6	B0/110		G0/110
BVH	(80°-90°)	2.0	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2
2.5°	729.3	729.3	732.9	736.4	738.5	744.1	748.1	751.2	751.2	753.2	749.7
5°	680.9	680.9	683.9	692.6	701.8	713.5	726.7	740.0	742.5	752.2	751.7
7.5°	636.0	640.1	645.2	653.9	663.5	680.9	699.2	722.2	724.7	748.1	753.2
10°	604.9	607.5	610.5	620.2	634.5	654.4	674.2	701.3	705.8	741.0	753.2
12.5°	580.0	580.5	585.1	595.8	609.5	628.9	651.3	680.9	686.5	728.3	751.2
15°	562.1	561.6	566.7	576.9	590.2	610.0	631.9	663.0	669.2	717.6	750.7
17.5°	551.4	551.9	556.0	563.7	576.4	595.3	617.7	648.3	654.4	708.9	753.2
20°	551.4	551.4	554.0	557.5	567.2	584.0	606.0	637.6	643.7	703.3	756.8
22.5°	562.1	561.1	563.1	560.1	564.7	576.4	598.8	630.4	637.0	700.7	762.4
25°	581.5	579.5	581.0	574.4	569.3	574.4	594.2	627.4	634.5	701.3	767.5
27.5°	608.5	608.5	605.4	596.3	583.5	577.9	593.7	625.3	632.5	701.3	771.1
30°	646.2	644.7	640.1	630.9	611.1	592.2	598.8	625.3	632.5	701.8	772.1
32.5°	683.9	684.9	687.5	678.3	651.3	616.7	611.1	629.9	636.0	701.3	770.6
35°	722.2	722.7	733.9	734.9	700.2	655.9	631.9	642.1	646.2	706.4	771.6
37.5°	755.8	758.3	780.3	791.0	762.4	706.4	665.1	665.1	667.1	720.1	777.7
40°	793.5	800.1	826.6	850.6	839.4	771.1	713.5	698.7	699.7	745.1	791.5
42.5°	837.3	845.5	880.1	914.8	914.3	850.6	774.6	752.2	753.2	788.4	819.5
45°	892.9	898.5	942.3	985.6	994.8	938.2	851.6	822.0	823.1	854.1	874.0
47.5°	960.7	967.3	1009.6	1061.6	1085.0	1043.7	951.5	919.4	916.3	938.2	952.5
50°	1049.3	1062.1	1087.1	1137.0	1193.6	1166.0	1068.7	1036.6	1032.5	1049.8	1054.4
52.5°	1133.9	1145.7	1155.9	1201.7	1311.3	1317.9	1212.4	1177.3	1173.2	1177.3	1182.9
55°	1146.7	1153.3	1160.9	1223.1	1406.6	1511.1	1376.0	1334.2	1322.5	1314.9	1333.7
57.5°	1045.3	1041.2	1066.7	1151.3	1422.4	1724.6	1597.2	1516.2	1505.0	1462.7	1443.8
60°	827.6	822.0	846.0	961.7	1333.7	1830.6	1904.0	1717.5	1689.9	1548.3	1529.9
62.5°	581.5	574.9	606.0	674.2	1034.6	1809.7	2250.0	1908.1	1853.5	1624.2	1599.2
65°	448.0	444.9	461.7	477.0	631.4	1567.6	2440.6	2280.1	2167.5	1706.8	1674.7
67.5°	351.1	355.2	376.1	420.4	407.7	977.0	2422.8	2847.8	2735.2	1858.6	1838.3
70°	282.3	283.4	309.3	380.2	384.8	497.4	2051.3	3141.4	3139.9	2103.8	1968.2
72.5°	170.7	175.3	217.6	328.7	388.3	380.7	1379.1	2878.4	2918.2	2160.9	1775.1
75°	82.1	86.6	112.6	220.7	385.8	370.5	746.1	2179.2	2230.2	1937.6	1439.2
77.5°	30.6	34.7	52.0	108.0	285.9	339.4	392.4	1469.3	1509.5	1418.3	974.9
80°	9.7	11.2	20.4	49.4	145.2	280.3	252.8	828.7	855.7	620.7	327.7
82.5°	1.0	1.5	5.6	16.8	56.1	142.7	148.3	311.9	325.7	121.3	66.3
85°	0.0	0.0	0.0	0.0	1.0	1.0	36.7	59.6	48.9	11.7	19.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.5	1.5	1.5	2.0
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°	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2	750.2
2.5°	749.2	749.2	745.6	740.0	732.9	722.7	720.1	712.0	712.0	705.3	704.3
5°	750.2	747.1	735.4	718.1	694.1	668.1	651.8	634.0	618.7	609.0	610.0
7.5°	750.2	743.6	720.1	681.9	637.0	592.2	558.1	518.3	500.0	487.7	493.3
10°	748.1	736.9	696.2	638.1	567.2	505.0	449.0	403.1	371.5	358.3	347.1
12.5°	743.6	727.2	666.1	583.5	492.8	411.3	333.8	273.7	231.9	211.0	208.4
15°	739.5	717.1	630.9	523.9	408.7	302.2	215.6	158.0	122.3	114.2	115.2
17.5°	738.5	707.4	597.3	460.7	326.7	201.3	124.4	100.4	95.3	93.3	92.8
20°	739.0	698.7	560.6	398.0	231.4	125.4	94.3	88.7	86.6	85.6	85.1
22.5°	741.0	689.0	524.4	332.3	158.0	91.7	84.1	80.5	78.0	76.4	75.9
25°	741.0	678.3	484.2	262.5	103.5	80.5	75.4	70.8	67.3	65.2	65.2
27.5°	739.5	666.1	442.4	199.3	82.1	71.9	66.3	60.1	55.6	53.0	53.0
30°	734.9	651.3	402.1	139.1	71.9	64.2	57.1	49.4	43.8	41.3	40.3
32.5°	728.3	635.5	355.7	97.8	64.7	56.1	47.9	39.8	34.7	31.6	31.6
35°	721.1	619.7	305.8	74.9	58.6	49.4	40.3	32.1	27.5	25.5	25.0
37.5°	717.6	602.9	256.9	64.7	52.5	42.3	32.6	26.0	22.4	20.9	20.4
40°	720.1	590.2	209.0	58.1	46.9	35.7	27.0	21.9	18.9	16.8	16.8
42.5°	735.4	583.0	163.6	53.0	41.8	30.1	22.4	17.8	14.8	13.3	13.3
45°	766.5	588.1	124.4	48.4	35.7	25.0	18.9	14.3	11.2	9.7	9.7
47.5°	818.5	608.5	94.3	44.3	30.6	20.4	15.3	11.2	8.7	7.6	7.1
50°	894.4	648.8	73.9	40.3	25.5	17.3	12.7	8.7	6.6	5.6	5.6
52.5°	1004.0	718.6	63.2	35.7	20.9	14.3	10.2	6.6	5.1	4.1	4.1
55°	1138.5	807.3	57.1	31.6	16.8	11.7	8.2	5.1	3.6	3.1	2.5
57.5°	1247.6	877.6	53.5	27.5	14.3	10.2	6.1	4.1	3.1	2.0	2.0
60°	1343.9	922.9	47.4	22.9	12.2	8.2	5.1	3.1	2.0	1.5	1.5
62.5°	1421.9	952.5	39.2	18.3	10.2	6.6	4.1	2.5	2.0	1.5	1.5
65°	1510.6	976.5	32.1	14.3	8.7	5.6	3.6	2.0	1.5	1.5	1.5
67.5°	1684.3	1030.0	24.0	11.2	6.6	4.6	3.1	2.0	1.5	1.0	1.0
70°	1752.1	967.3	18.9	9.2	5.1	4.1	3.1	2.0	1.0	1.0	1.0
72.5°	1491.2	724.2	14.8	7.6	4.6	3.6	3.1	2.0	1.5	1.5	1.0
75°	1182.9	489.2	11.7	6.1	4.6	4.1	3.1	3.1	2.5	2.0	2.0
77.5°	755.3	216.6	9.2	5.1	4.6	5.1	4.6	3.1	3.1	2.5	2.5
80°	225.3	52.0	6.6	4.1	3.6	4.1	4.6	3.1	2.0	1.5	1.5
82.5°	48.9	12.2	4.1	2.0	2.5	2.0	3.1	3.1	2.0	1.5	1.5
85°	16.3	4.6	2.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.0
87.5°	1.0	1.5	1.5	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0
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)