

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: P401075

Luminaire Tested: **ENT-SA1B-727-U-SL4-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401075  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1B-727-U-SL4-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2352 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

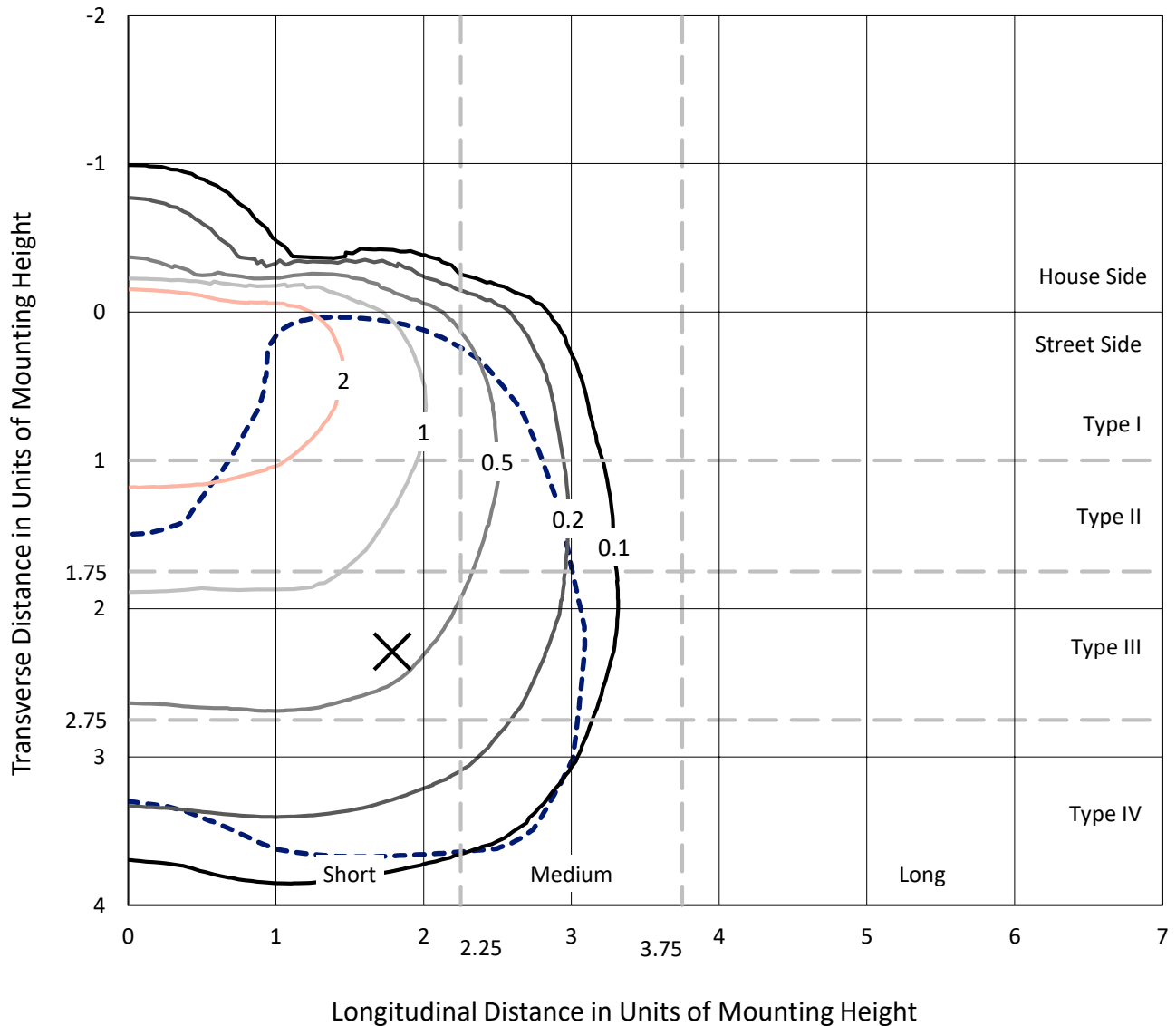
Input Watts (W): 25.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

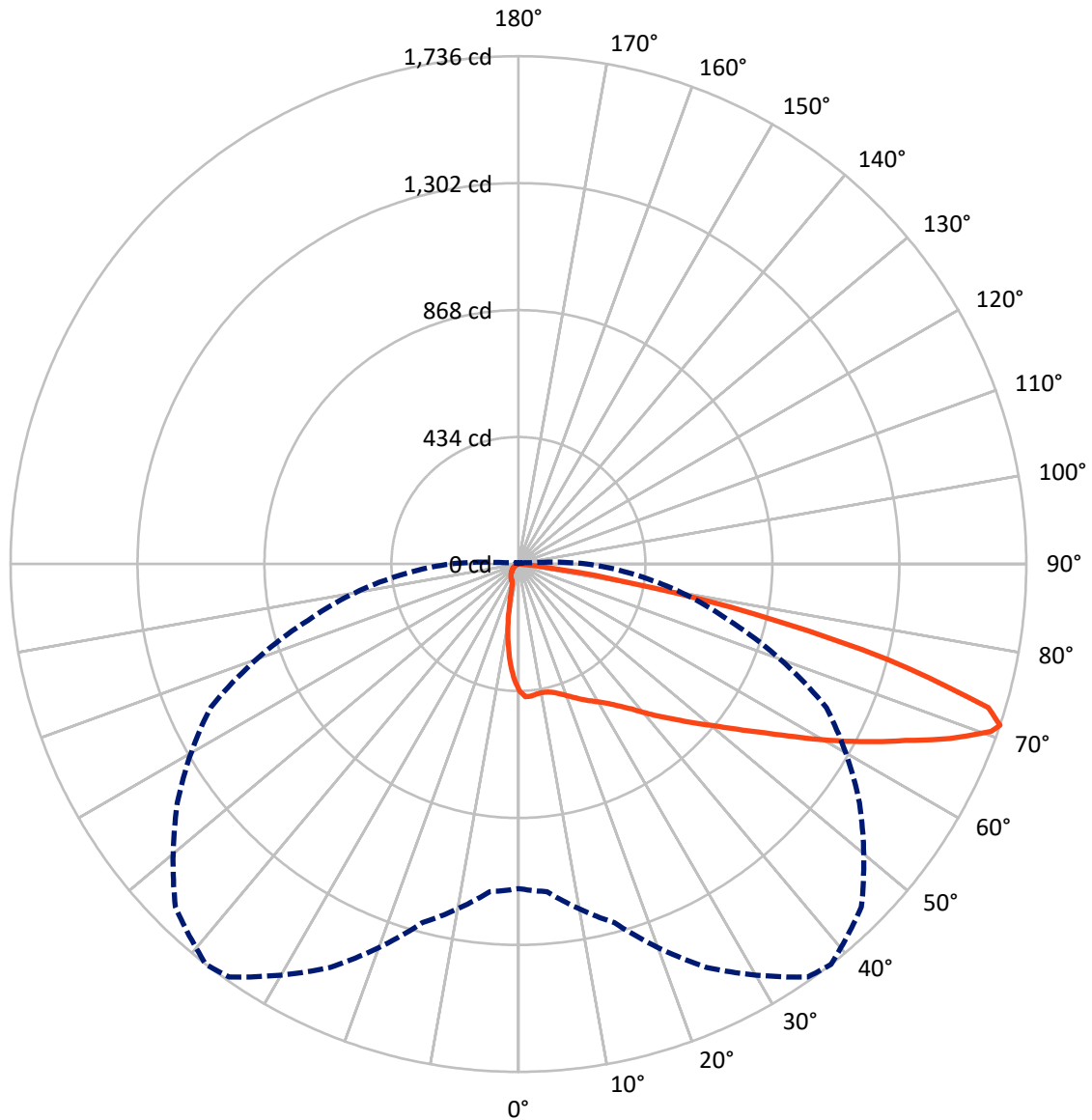
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.5 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	200.9	0.0	200.9
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	2151.1	0.0	2151.1
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	2352.0	0.0	2352.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.6	1.6
10°-20°	88.7	3.8
20°-30°	142.2	6.0
30°-40°	216.3	9.2
40°-50°	337.1	14.3
50°-60°	493.0	21.0
60°-70°	632.3	26.9
70°-80°	386.5	16.4
80°-90°	19.4	0.8
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°	2352.0	100.0
0°-180°	2352.0	100.0



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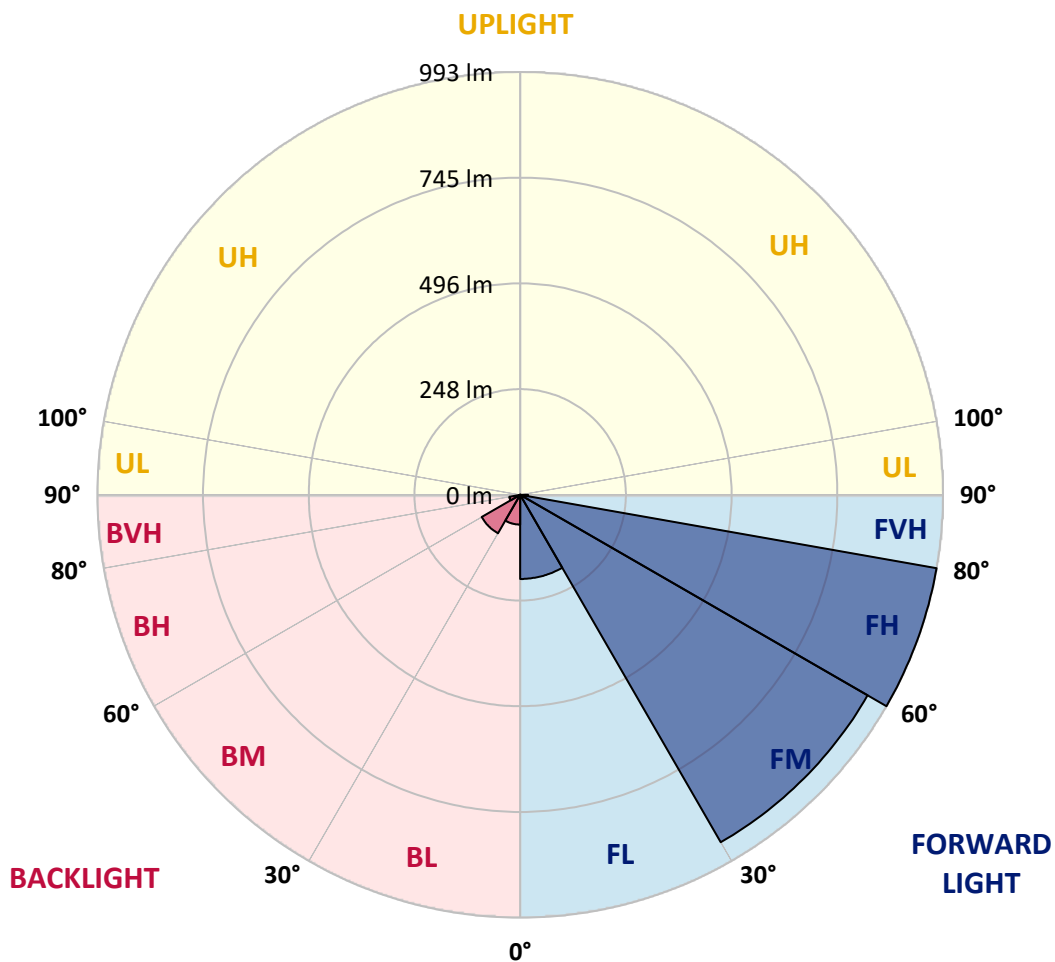
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	197.6	8.4			
FM (30°-60°)	942.0	40.1			
FH (60°-80°)	992.9	42.2			G1/1800
FVH (80°-90°)	18.5	0.8			G1/100
BL (0°-30°)	69.9	3.0	B0/110		
BM (30°-60°)	104.4	4.4	B0/220		
BH (60°-80°)	25.8	1.1	B0/110		G0/110
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6
2.5°	459.3	458.0	459.3	458.0	455.6	454.4	452.7	448.3	444.2	439.3	432.0
5°	460.1	459.3	459.3	457.6	454.8	453.6	451.9	447.5	442.2	434.8	423.8
7.5°	455.6	455.2	454.4	452.7	449.5	448.7	447.5	442.2	436.9	429.1	415.7
10°	448.3	449.1	448.7	448.7	447.5	446.6	445.8	439.7	434.0	425.0	410.8
12.5°	441.3	442.2	444.2	447.5	448.7	449.1	449.1	443.0	436.0	426.3	411.6
15°	436.9	438.5	444.2	450.7	454.4	455.6	456.8	450.3	442.2	431.6	416.1
17.5°	435.6	438.1	449.1	459.3	466.2	467.0	467.0	458.9	450.3	438.1	421.4
20°	439.7	443.0	457.2	471.5	480.1	480.9	479.2	468.6	458.5	445.0	425.9
22.5°	451.9	454.8	471.1	487.8	495.9	496.8	493.1	478.4	467.4	456.4	432.0
25°	473.1	474.8	492.3	508.2	512.7	513.9	507.8	490.2	477.6	467.4	440.5
27.5°	501.2	502.1	518.0	529.8	530.6	530.2	523.7	505.3	492.7	484.1	453.6
30°	530.6	531.8	544.8	552.6	549.3	547.7	542.0	522.4	511.0	504.5	472.3
32.5°	557.9	559.1	573.4	577.4	570.1	568.9	564.8	544.0	534.3	537.5	499.2
35°	584.8	584.8	601.1	603.1	596.6	596.6	596.6	571.7	570.1	581.1	536.7
37.5°	608.8	612.9	630.0	629.2	628.0	628.8	631.2	612.5	618.2	636.9	586.0
40°	629.2	634.5	657.3	659.4	664.7	669.1	672.8	663.0	676.5	707.0	649.2
42.5°	647.5	653.7	683.0	692.4	707.0	713.2	720.1	717.6	747.4	803.2	729.9
45°	671.2	677.7	707.9	730.3	750.6	758.8	774.3	784.9	834.2	897.8	817.1
47.5°	702.6	707.0	734.7	770.2	797.9	812.6	836.6	863.9	923.8	998.0	894.9
50°	745.3	745.8	766.5	812.6	853.7	869.6	911.2	946.7	1021.6	1086.4	951.1
52.5°	792.6	790.2	806.5	864.7	916.9	938.5	987.4	1036.7	1112.1	1150.4	976.4
55°	837.4	838.7	848.9	920.2	996.4	1017.2	1079.1	1129.2	1194.8	1189.5	990.3
57.5°	889.2	888.8	901.8	980.9	1089.3	1113.3	1178.1	1219.3	1245.0	1217.7	992.7
60°	938.1	936.9	956.8	1053.4	1188.3	1223.8	1282.0	1280.4	1295.1	1235.6	990.7
62.5°	981.7	984.6	1019.6	1137.8	1299.2	1337.5	1366.8	1346.4	1350.5	1256.4	965.4
65°	1034.7	1040.0	1096.6	1240.1	1436.1	1454.4	1465.8	1432.8	1392.1	1239.7	888.8
67.5°	1101.5	1117.4	1197.3	1390.8	1578.7	1591.3	1591.8	1485.0	1390.4	1155.3	747.4
70°	1128.0	1144.7	1271.9	1510.3	1698.9	1714.8	1665.1	1476.8	1280.8	904.7	504.5
71°	1109.7	1124.7	1269.8	1521.7	1723.8	1736.4	1658.6	1423.4	1161.4	745.3	390.8
72.5°	977.2	1016.3	1191.6	1449.9	1679.4	1679.8	1553.0	1297.5	923.8	465.4	196.4
75°	527.7	575.0	873.3	1103.6	1295.5	1305.7	1194.8	901.0	447.0	120.6	47.7
77.5°	174.0	196.0	391.6	573.0	812.6	828.5	730.7	400.2	141.0	40.8	24.9
80°	109.2	111.7	132.4	240.8	361.5	374.9	300.7	162.2	63.6	22.4	17.1
82.5°	18.3	22.0	62.3	70.9	127.6	101.1	68.5	82.7	29.7	10.2	14.7
85°	0.0	0.0	0.4	0.4	2.0	0.4	0.4	16.7	1.6	1.6	7.7
87.5°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6	433.6
2.5°	428.7	425.4	418.9	412.0	403.4	396.1	393.7	388.4	385.9	383.9	383.9
5°	416.9	411.2	397.3	383.1	369.2	354.5	341.1	328.5	322.3	313.8	317.9
7.5°	407.1	397.3	377.8	355.4	326.8	297.9	275.5	255.9	239.6	234.3	230.7
10°	400.2	388.0	359.4	325.2	283.6	242.5	207.8	175.6	156.9	145.5	145.5
12.5°	399.4	383.9	346.8	294.2	234.3	178.5	135.7	105.1	90.1	83.1	82.7
15°	402.2	383.5	335.4	266.1	189.1	123.9	84.8	71.3	67.6	66.8	66.8
17.5°	404.7	383.1	321.9	234.3	139.4	81.5	67.2	64.8	64.0	63.6	63.6
20°	407.1	381.0	306.5	198.5	98.6	66.4	62.8	61.5	61.1	60.7	60.7
22.5°	410.4	379.0	290.6	157.7	72.9	61.9	59.9	58.7	58.3	58.3	58.3
25°	414.9	377.8	271.0	119.4	62.8	58.7	56.6	55.8	55.8	55.4	55.4
27.5°	423.4	379.0	249.8	85.6	58.7	55.4	54.2	53.4	53.4	53.0	53.0
30°	435.2	382.7	223.3	66.8	55.4	52.2	50.9	50.5	50.1	50.1	50.1
32.5°	451.9	388.4	194.4	57.1	51.3	48.9	47.7	47.3	47.3	47.3	46.9
35°	477.6	400.2	158.9	52.2	47.7	45.2	44.0	44.0	44.0	43.6	44.0
37.5°	516.7	419.3	123.1	48.1	43.6	41.6	40.8	40.3	40.3	40.3	40.3
40°	566.0	450.3	89.7	44.4	39.9	37.9	37.1	36.7	36.3	36.3	36.3
42.5°	629.6	484.5	65.2	40.3	36.7	34.6	33.8	33.0	32.2	31.8	31.8
45°	695.6	525.3	50.9	37.1	33.4	31.8	31.0	29.7	28.5	27.3	27.3
47.5°	759.6	556.7	43.6	33.4	30.6	28.9	28.1	26.5	24.5	23.2	23.2
50°	800.0	566.4	39.1	30.2	27.7	26.5	25.3	23.2	20.4	19.2	19.2
52.5°	812.6	548.5	35.0	27.3	25.3	24.0	22.4	19.6	16.7	15.1	15.1
55°	817.5	513.9	31.0	25.3	22.8	21.2	19.2	16.3	13.4	11.8	11.8
57.5°	811.4	465.0	27.7	22.8	20.4	18.7	16.3	13.0	10.2	9.0	9.0
60°	790.6	394.1	24.9	20.4	17.9	15.9	13.4	10.2	7.7	6.1	6.5
62.5°	734.3	304.8	21.6	17.1	15.5	13.4	10.6	7.7	4.9	4.1	4.1
65°	644.7	211.1	18.3	14.3	13.0	11.0	8.2	5.3	2.9	2.4	2.4
67.5°	523.7	136.5	14.3	11.8	11.0	9.0	6.1	3.3	1.6	1.6	1.2
70°	328.9	67.6	11.4	9.0	9.0	6.9	4.5	2.0	1.2	1.2	1.2
71°	232.7	46.0	10.2	8.2	8.2	6.5	4.1	1.6	1.2	1.2	1.2
72.5°	105.1	28.9	8.6	7.3	6.9	5.3	3.7	1.6	1.6	1.6	1.6
75°	33.0	15.9	6.1	5.7	5.7	4.5	3.3	2.0	2.0	2.0	2.0
77.5°	22.0	12.2	4.1	3.7	4.5	4.5	3.3	2.4	2.4	2.4	2.4
80°	17.9	6.5	2.4	2.4	3.3	4.1	3.3	2.4	2.9	2.4	2.4
82.5°	17.5	3.3	0.8	1.2	2.0	2.4	2.4	2.0	2.4	2.4	2.4
85°	7.3	0.8	0.4	0.8	0.8	1.2	1.2	1.6	2.0	2.0	2.0
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.8	0.8	1.2	1.6	1.6
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)