

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: P401217

Luminaire Tested: **ENT-SA1B-830-U-SL3-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1B-830-U-SL3-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2282 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

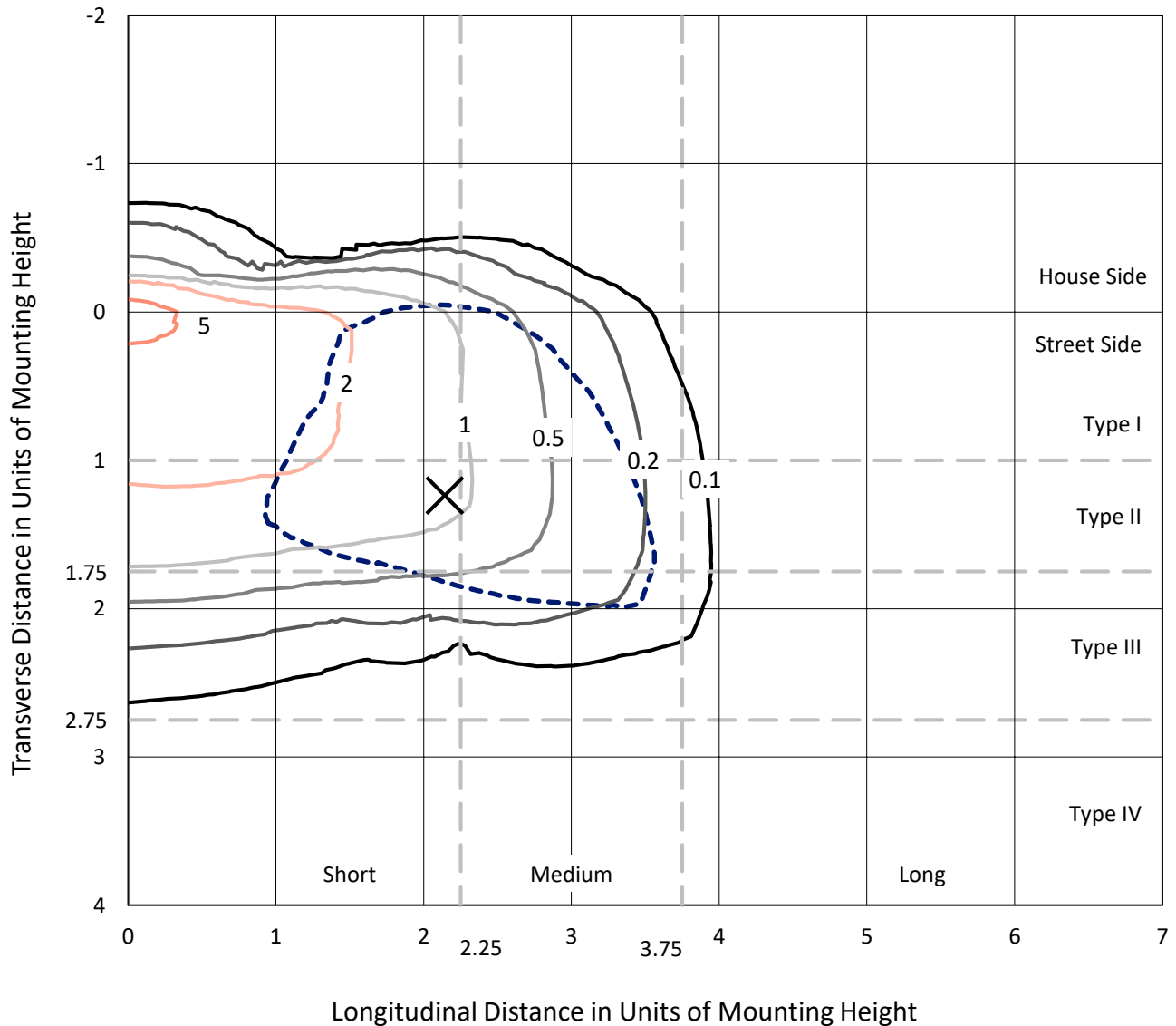
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

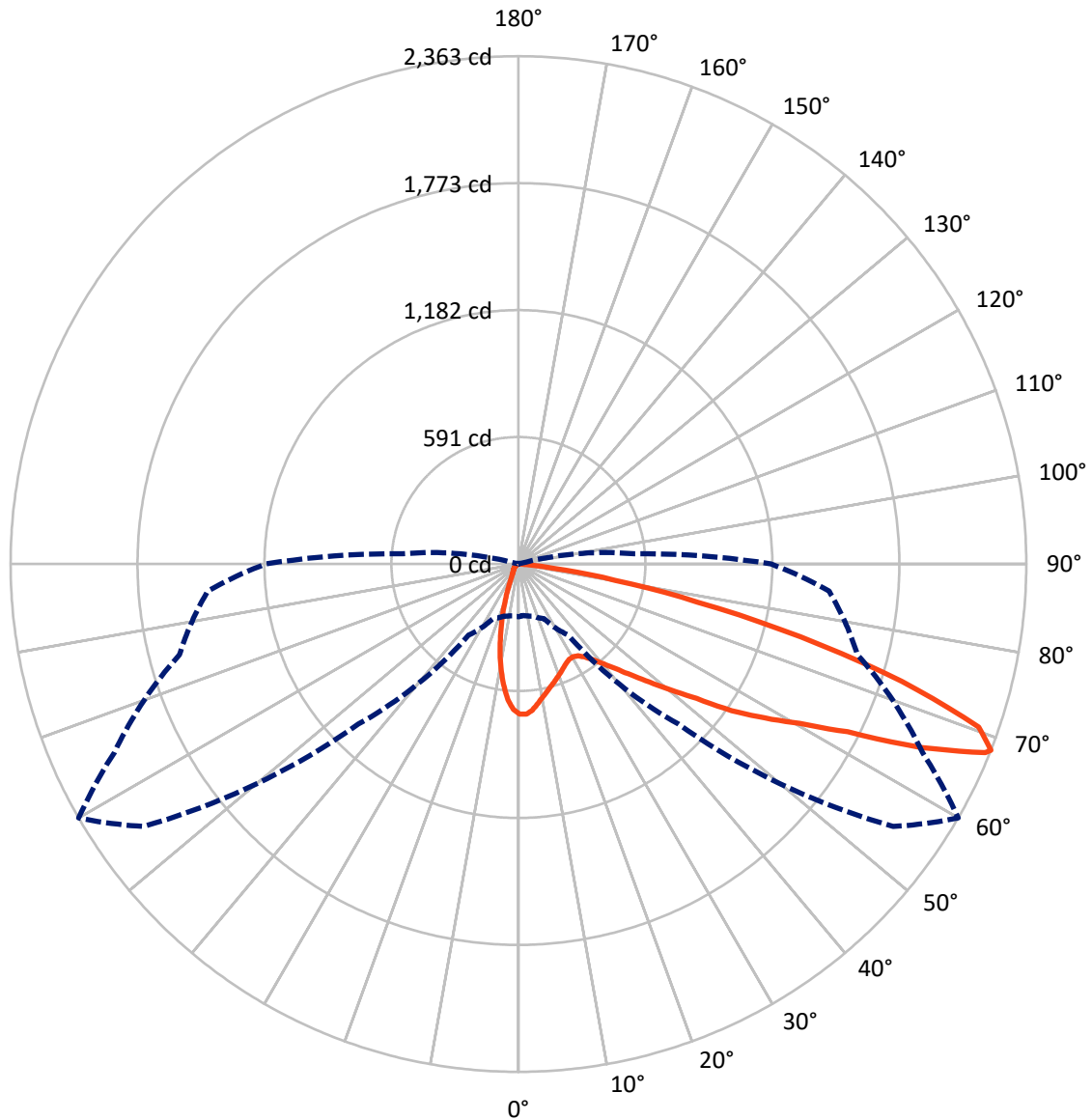
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	255.1	0.0	255.1
	% Fixture	11.2	0.0	11.2
Street Side	Lumens	2026.9	0.0	2026.9
	% Fixture	88.8	0.0	88.8
Total	Lumens	2282.0	0.0	2282.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.7	2.5
10°-20°	115.6	5.1
20°-30°	152.2	6.7
30°-40°	210.0	9.2
40°-50°	318.4	14.0
50°-60°	513.8	22.5
60°-70°	610.4	26.7
70°-80°	287.7	12.6
80°-90°	17.2	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°	2282.0	100.0
0°-180°	2282.0	100.0



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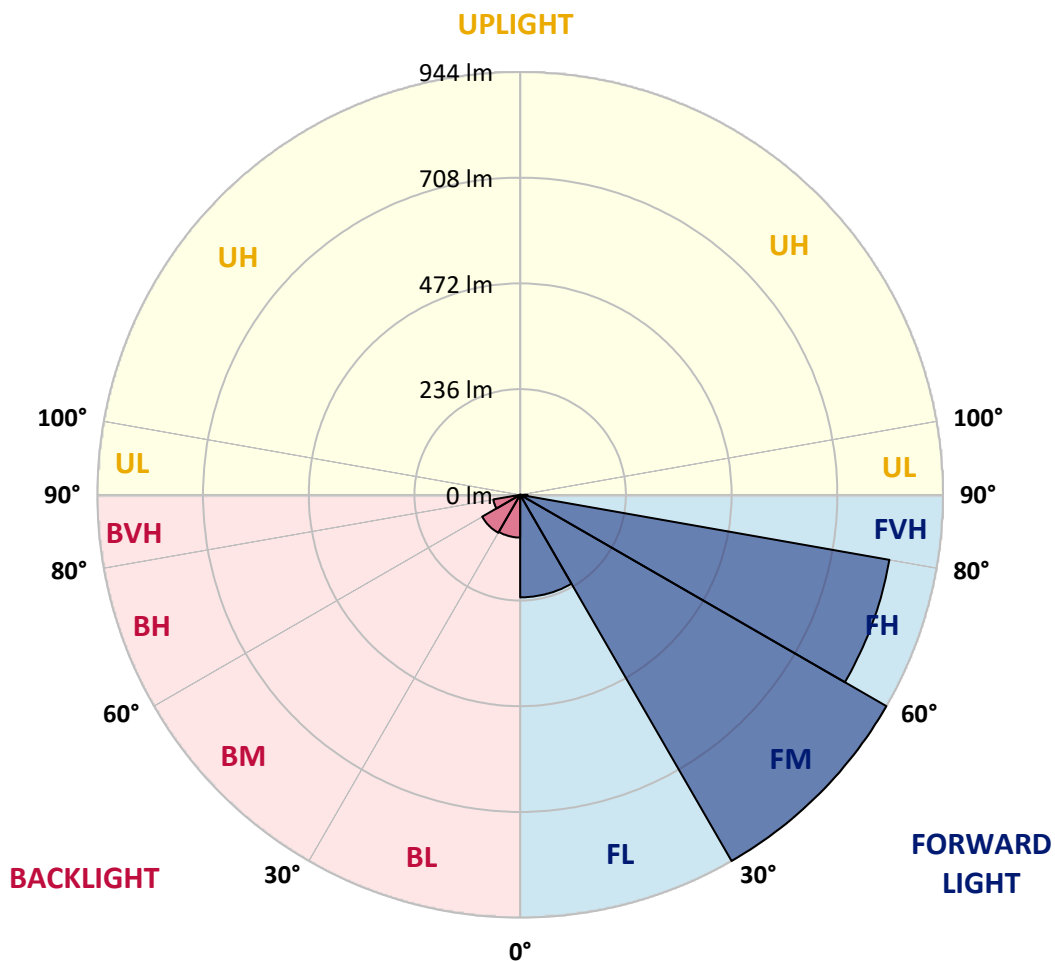
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.0	10.0			
FM (30°-60°)	944.2	41.4			
FH (60°-80°)	837.2	36.7			G1/1800
FVH (80°-90°)	16.4	0.7			G1/100
BL (0°-30°)	95.5	4.2	B0/110		
BM (30°-60°)	98.1	4.3	B0/220		
BH (60°-80°)	60.9	2.7	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5
2.5°	692.3	690.8	695.0	696.2	697.3	699.7	699.3	699.7	700.0	699.3	694.6
5°	645.1	647.8	651.6	656.7	661.7	673.3	678.0	682.6	685.7	688.0	683.8
7.5°	598.6	604.0	607.1	616.4	624.2	636.2	646.2	654.4	662.1	670.6	666.4
10°	561.4	563.4	566.1	574.6	586.2	604.4	617.6	627.6	636.9	651.3	647.8
12.5°	525.0	526.2	531.6	540.9	552.9	575.4	592.8	604.4	614.9	632.7	633.1
15°	498.3	498.7	502.2	510.7	524.6	548.7	571.1	583.9	598.6	620.3	621.4
17.5°	480.9	480.5	481.3	486.7	499.9	522.7	549.8	564.9	582.3	610.2	611.4
20°	475.5	474.7	473.1	472.0	480.1	499.9	530.5	547.1	567.6	602.9	603.2
22.5°	480.1	478.6	475.1	468.5	470.8	483.6	509.2	529.3	554.5	599.0	596.3
25°	491.3	491.3	486.7	476.2	470.8	473.5	494.1	513.4	541.3	597.1	591.2
27.5°	509.9	509.2	503.0	492.1	482.1	474.7	484.8	503.0	531.6	599.4	588.9
30°	532.4	530.1	523.5	515.7	503.3	487.5	486.7	500.3	527.0	606.7	590.5
32.5°	553.7	553.7	551.0	543.6	531.6	510.7	498.7	509.5	532.8	618.7	595.5
35°	580.0	579.6	580.4	577.7	567.2	545.2	525.8	531.2	550.6	638.9	607.5
37.5°	600.9	601.3	607.9	612.5	607.9	584.7	564.5	564.5	580.8	669.1	628.0
40°	621.4	622.2	634.6	648.2	649.3	630.7	611.4	611.0	620.3	706.2	659.8
42.5°	640.0	643.1	660.9	684.2	697.7	685.3	671.0	666.4	671.0	762.4	711.3
45°	659.8	666.0	690.8	724.4	746.5	746.9	741.5	736.1	738.4	825.5	780.2
47.5°	685.3	692.3	723.3	764.7	806.5	817.4	822.4	820.5	814.3	905.3	869.2
50°	726.8	733.3	762.4	808.8	866.1	905.3	918.8	921.1	913.0	993.5	970.3
52.5°	797.2	801.1	828.2	865.0	929.3	1002.4	1038.1	1038.4	1020.3	1096.9	1079.5
55°	872.7	882.8	914.5	957.1	1023.3	1105.4	1194.5	1204.2	1148.0	1187.5	1159.3
57.5°	873.9	883.6	936.2	1017.9	1156.5	1265.3	1344.7	1351.7	1289.3	1260.3	1234.4
60°	781.7	786.8	860.0	979.6	1204.2	1481.0	1515.9	1505.4	1388.5	1335.4	1328.5
62.5°	551.7	554.1	640.8	798.4	1098.9	1584.0	1776.4	1720.3	1529.4	1446.2	1469.4
65°	347.3	346.1	382.2	508.0	817.4	1482.6	2098.6	2057.5	1788.4	1584.8	1579.4
67.5°	256.3	250.1	259.8	298.9	467.0	1163.9	2157.8	2342.9	2035.1	1642.5	1484.1
68°	245.9	240.4	250.5	280.7	403.8	1053.5	2129.2	2363.4	2074.2	1633.2	1451.6
70°	208.7	203.7	212.2	235.0	281.1	683.8	1878.7	2272.4	2109.8	1554.2	1279.3
72.5°	148.3	151.0	173.5	201.7	238.1	350.8	1383.4	1866.3	1814.8	1382.3	973.4
75°	87.9	92.9	122.4	162.6	218.8	231.5	892.5	1356.7	1331.6	957.1	527.4
77.5°	31.0	32.9	60.8	108.4	180.4	183.5	497.2	853.0	793.4	391.1	155.7
80°	11.2	11.2	22.5	60.4	116.5	140.2	264.1	455.3	313.2	101.4	43.0
82.5°	1.9	1.9	5.0	20.5	51.5	74.7	122.7	161.8	92.9	22.5	21.3
85°	0.0	0.0	0.0	0.0	0.8	0.8	36.0	36.4	17.0	3.1	9.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.8	0.8	0.8	1.2
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°	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5	698.5
2.5°	692.7	691.9	687.7	679.9	673.3	662.5	660.5	650.1	646.2	643.1	646.2
5°	680.7	676.4	662.1	644.7	621.1	593.2	576.9	554.5	549.8	537.4	544.8
7.5°	660.9	651.3	624.5	587.0	543.6	501.0	468.5	437.1	410.4	401.1	398.4
10°	640.0	626.5	581.6	523.5	460.8	395.3	346.9	301.6	276.5	252.8	252.1
12.5°	620.3	599.8	534.7	453.8	366.3	288.5	225.7	178.1	148.3	132.0	136.3
15°	604.4	576.9	487.5	384.1	273.4	185.9	127.8	97.2	86.7	81.7	82.5
17.5°	588.9	552.5	441.8	311.3	194.8	114.6	82.9	72.4	69.3	68.1	67.4
20°	575.0	528.9	393.8	245.5	128.5	79.4	68.1	64.7	63.5	62.7	62.7
22.5°	561.0	504.1	345.8	182.0	87.9	65.0	61.2	59.6	58.9	57.7	57.7
25°	548.3	480.1	297.8	127.4	67.4	58.1	55.4	53.8	52.3	51.1	51.1
27.5°	538.6	461.9	253.2	90.2	56.5	52.3	49.6	46.9	44.9	43.4	43.4
30°	532.4	444.1	210.2	68.1	50.3	46.5	43.0	39.5	36.4	34.5	34.1
32.5°	528.9	429.4	170.4	55.8	44.9	40.7	36.4	32.5	29.0	26.7	26.7
35°	530.5	417.8	130.5	47.2	40.7	35.6	31.0	26.3	23.2	21.3	20.9
37.5°	540.5	411.2	97.2	41.8	36.4	31.0	26.3	21.7	18.6	17.0	16.6
40°	559.5	412.7	74.0	37.9	33.3	27.1	21.7	17.8	15.1	13.6	13.6
42.5°	597.8	424.0	58.5	34.8	29.8	23.2	18.2	14.7	12.4	11.2	10.8
45°	648.5	445.3	48.0	32.1	26.3	19.7	15.5	12.4	10.1	8.9	8.9
47.5°	725.2	479.3	41.4	29.4	22.8	16.6	12.8	10.1	7.7	7.0	6.6
50°	813.9	527.0	36.4	26.3	20.1	13.9	10.8	7.7	6.2	5.0	5.0
52.5°	904.5	580.0	32.9	23.6	17.4	12.0	8.5	5.8	4.3	3.5	3.5
55°	987.7	624.5	29.4	21.3	14.7	10.1	7.0	4.6	3.1	2.3	2.3
57.5°	1068.3	665.2	25.6	18.6	12.0	8.1	5.4	3.5	2.3	1.5	1.5
60°	1169.3	717.9	22.1	15.9	9.7	6.6	4.3	2.7	1.5	1.2	0.8
62.5°	1291.3	756.2	18.6	12.8	7.7	5.0	3.1	1.9	1.2	0.4	0.4
65°	1336.2	705.5	15.5	10.5	6.2	3.9	2.3	1.5	0.8	0.4	0.4
67.5°	1210.7	568.4	12.4	8.1	4.6	2.7	1.9	1.2	0.8	0.4	0.4
68°	1175.9	540.5	12.0	7.7	4.3	2.7	1.5	1.2	0.4	0.4	0.0
70°	992.8	434.0	9.7	5.8	3.5	2.3	1.5	0.8	0.4	0.4	0.0
72.5°	736.1	299.3	7.0	3.9	2.3	1.5	1.2	0.8	0.4	0.4	0.0
75°	388.4	116.5	5.4	3.1	1.9	1.5	1.2	1.2	0.8	0.4	0.4
77.5°	111.5	36.8	4.3	2.3	1.9	1.9	1.9	1.5	1.5	1.2	0.8
80°	32.5	12.0	2.7	1.5	1.9	1.9	2.3	1.9	1.9	1.5	1.5
82.5°	17.4	4.6	1.5	1.2	1.2	1.5	1.9	1.5	1.2	0.8	0.4
85°	7.4	1.5	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.4	0.4
87.5°	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)