

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: P400929

Luminaire Tested: **ENT-SA1A-735-U-SL3-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400929
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-SA1A-735-U-SL3-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA 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: 2152 lumens
Efficiency: N/A
Efficacy: 107.1 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): 20.1
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

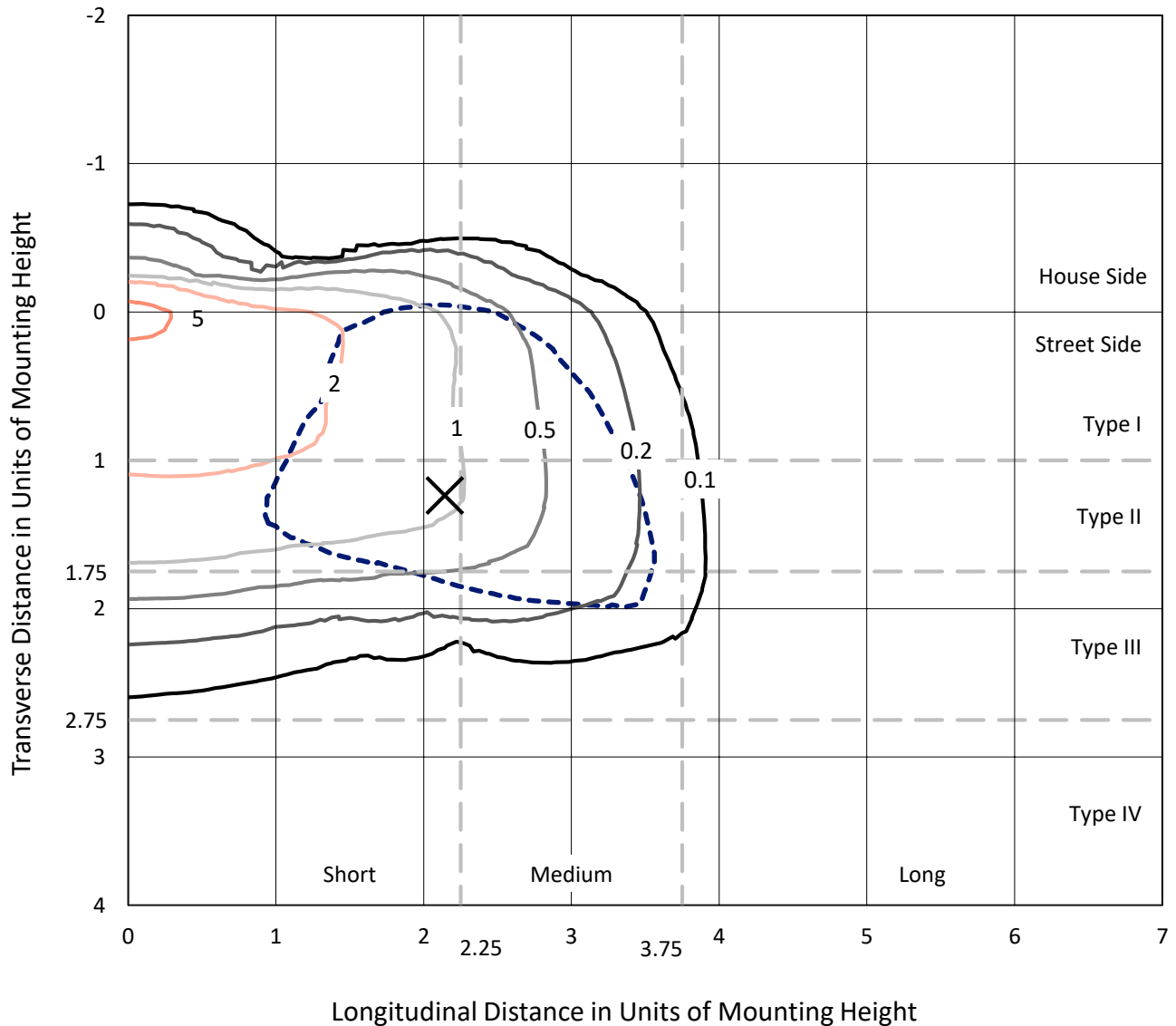


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Iso-Footcandle Lines of Horizontal Illumination

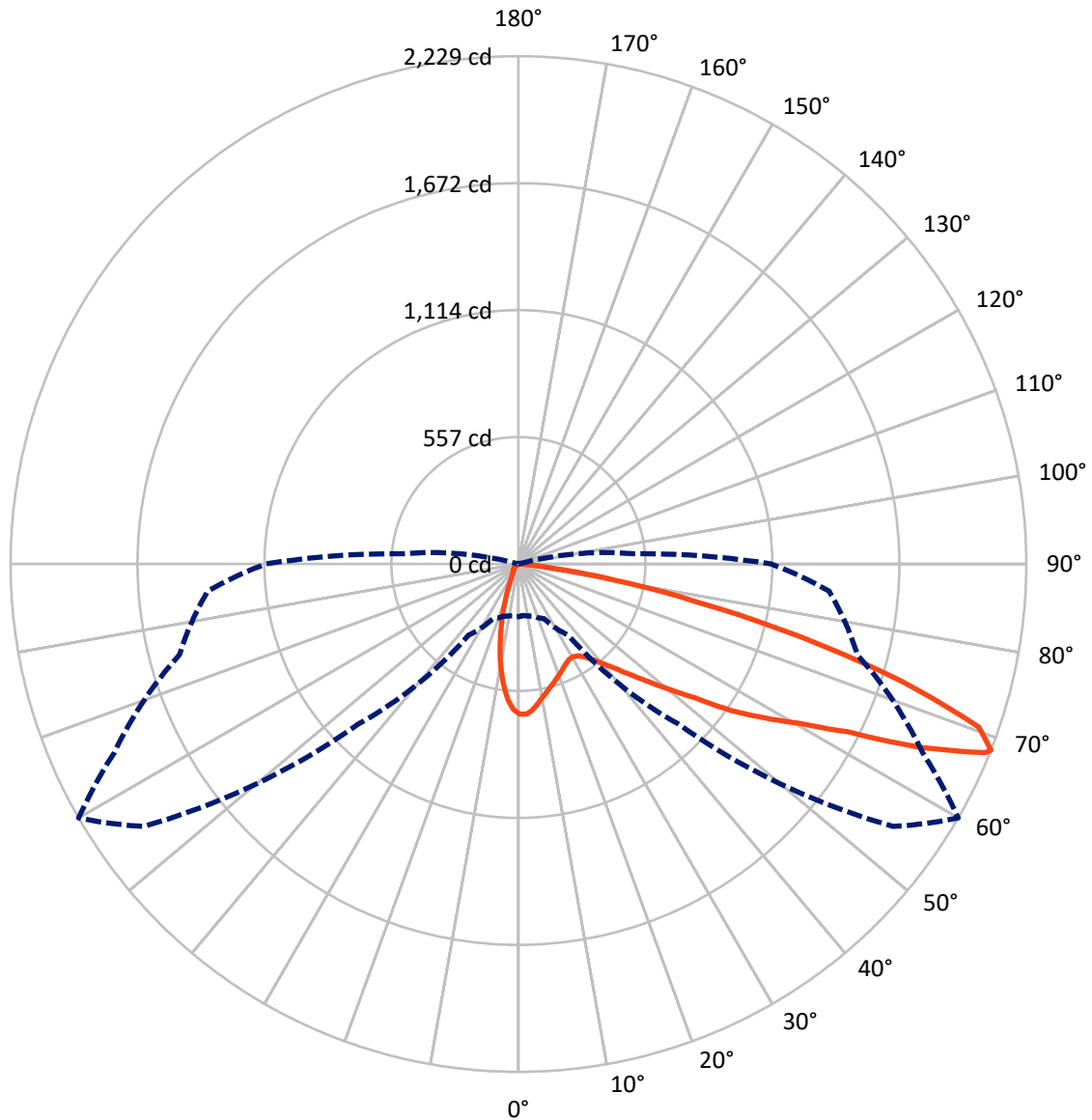
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.6 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	240.6	0.0	240.6
	% Fixture	11.2	0.0	11.2
Street Side	Lumens	1911.4	0.0	1911.4
	% Fixture	88.8	0.0	88.8
Total	Lumens	2152.0	0.0	2152.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	2.5
10°-20°	109.0	5.1
20°-30°	143.5	6.7
30°-40°	198.1	9.2
40°-50°	300.3	14.0
50°-60°	484.5	22.5
60°-70°	575.6	26.7
70°-80°	271.3	12.6
80°-90°	16.2	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°	2152.0	100.0
0°-180°	2152.0	100.0



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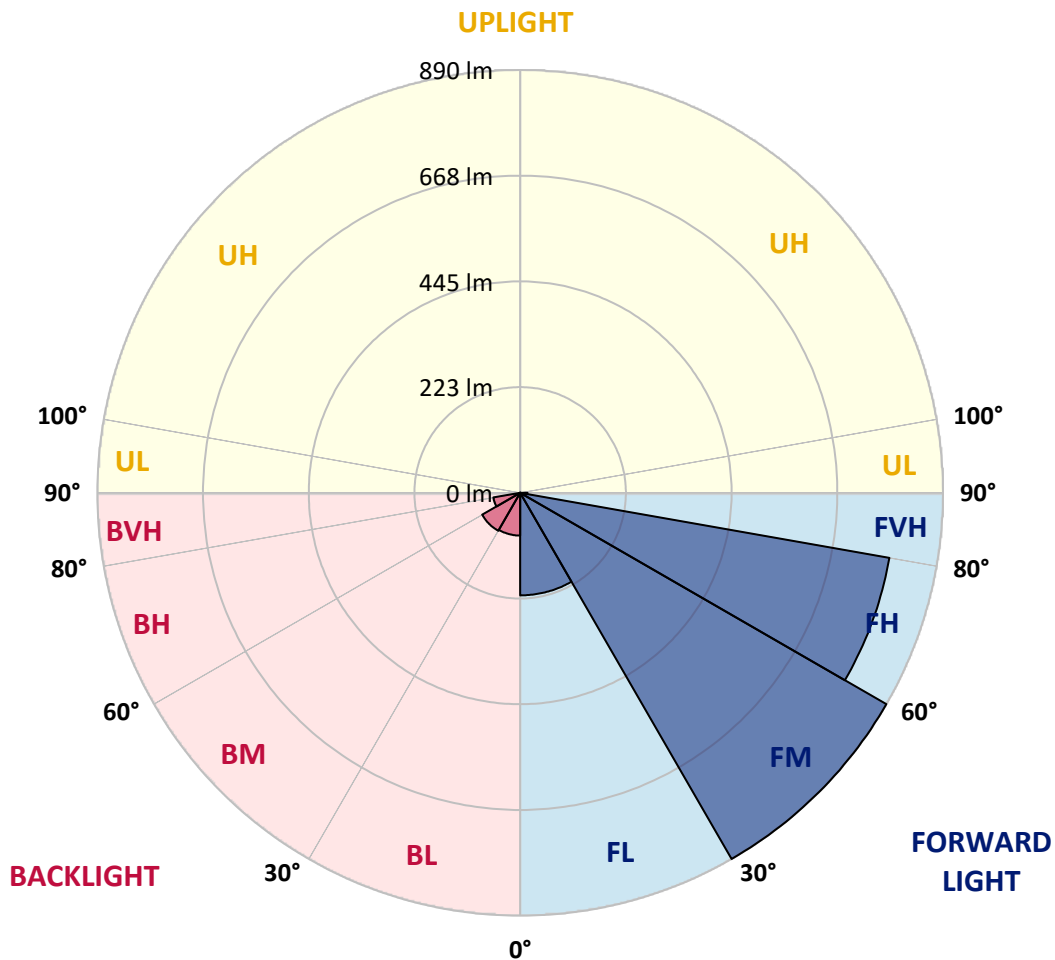
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	216.0	10.0			
FM	(30°-60°)	890.4	41.4			
FH	(60°-80°)	789.5	36.7			G1/1800
FVH	(80°-90°)	15.5	0.7			G1/100
BL	(0°-30°)	90.0	4.2	B0/110		
BM	(30°-60°)	92.5	4.3	B0/220		
BH	(60°-80°)	57.4	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°	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7
2.5°	652.9	651.4	655.4	656.5	657.6	659.8	659.4	659.8	660.2	659.4	655.1
5°	608.3	610.9	614.5	619.3	624.0	635.0	639.4	643.7	646.7	648.8	644.8
7.5°	564.5	569.6	572.5	581.3	588.6	599.9	609.4	617.1	624.4	632.4	628.4
10°	529.4	531.3	533.8	541.9	552.8	570.0	582.4	591.9	600.6	614.2	610.9
12.5°	495.1	496.2	501.3	510.1	521.4	542.6	559.0	570.0	579.8	596.6	597.0
15°	469.9	470.3	473.6	481.6	494.8	517.4	538.6	550.6	564.5	584.9	586.0
17.5°	453.5	453.1	453.9	459.0	471.4	492.9	518.5	532.7	549.2	575.5	576.5
20°	448.4	447.7	446.2	445.1	452.8	471.4	500.2	515.9	535.3	568.5	568.9
22.5°	452.8	451.3	448.0	441.8	444.0	456.1	480.2	499.1	522.9	564.9	562.3
25°	463.4	463.4	459.0	449.1	444.0	446.6	465.9	484.2	510.5	563.0	557.6
27.5°	480.9	480.2	474.3	464.1	454.6	447.7	457.1	474.3	501.3	565.2	555.4
30°	502.1	499.9	493.7	486.4	474.7	459.7	459.0	471.8	496.9	572.2	556.8
32.5°	522.1	522.1	519.6	512.6	501.3	481.6	470.3	480.5	502.4	583.5	561.6
35°	547.0	546.6	547.3	544.8	534.9	514.1	495.9	501.0	519.2	602.5	572.9
37.5°	566.7	567.1	573.3	577.6	573.3	551.4	532.4	532.4	547.7	631.0	592.2
40°	586.0	586.8	598.5	611.2	612.3	594.8	576.5	576.2	584.9	666.0	622.2
42.5°	603.6	606.5	623.3	645.2	658.0	646.3	632.8	628.4	632.8	719.0	670.8
45°	622.2	628.0	651.4	683.2	704.0	704.3	699.2	694.1	696.3	778.5	735.7
47.5°	646.3	652.9	682.1	721.1	760.6	770.8	775.5	773.7	767.9	853.7	819.7
50°	685.4	691.6	719.0	762.8	816.8	853.7	866.5	868.7	861.0	936.9	915.0
52.5°	751.8	755.5	781.0	815.7	876.3	945.3	978.9	979.3	962.1	1034.4	1018.0
55°	823.0	832.5	862.4	902.6	965.1	1042.5	1126.4	1135.6	1082.6	1119.9	1093.2
57.5°	824.1	833.2	882.9	959.9	1090.7	1193.3	1268.1	1274.7	1215.9	1188.5	1164.0
60°	737.2	742.0	811.0	923.8	1135.6	1396.6	1429.5	1419.6	1309.4	1259.3	1252.8
62.5°	520.3	522.5	604.3	752.9	1036.3	1493.8	1675.2	1622.3	1442.3	1363.8	1385.7
65°	327.5	326.4	360.4	479.1	770.8	1398.1	1979.0	1940.3	1686.6	1494.5	1489.4
67.5°	241.7	235.9	245.0	281.9	440.4	1097.6	2034.9	2209.4	1919.1	1548.9	1399.6
68°	231.9	226.7	236.2	264.7	380.8	993.5	2007.9	2228.8	1956.0	1540.1	1368.9
70°	196.8	192.1	200.1	221.6	265.1	644.8	1771.6	2143.0	1989.6	1465.7	1206.4
72.5°	139.8	142.4	163.6	190.2	224.6	330.8	1304.6	1759.9	1711.4	1303.5	917.9
75°	82.9	87.6	115.4	153.4	206.3	218.4	841.6	1279.4	1255.7	902.6	497.3
77.5°	29.2	31.0	57.3	102.2	170.2	173.1	468.8	804.4	748.2	368.8	146.8
80°	10.6	10.6	21.2	57.0	109.9	132.2	249.0	429.4	295.4	95.7	40.5
82.5°	1.8	1.8	4.7	19.4	48.6	70.5	115.7	152.6	87.6	21.2	20.1
85°	0.0	0.0	0.0	0.0	0.7	0.7	34.0	34.3	16.1	2.9	8.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.7	0.7	0.7	1.1
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°	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7	658.7
2.5°	653.2	652.5	648.5	641.2	635.0	624.7	622.9	613.1	609.4	606.5	609.4
5°	641.9	637.9	624.4	607.9	585.7	559.4	544.1	522.9	518.5	506.8	513.7
7.5°	623.3	614.2	589.0	553.5	512.6	472.5	441.8	412.2	387.0	378.3	375.7
10°	603.6	590.8	548.4	493.7	434.5	372.8	327.2	284.4	260.7	238.4	237.7
12.5°	584.9	565.6	504.3	427.9	345.4	272.0	212.9	168.0	139.8	124.5	128.5
15°	570.0	544.1	459.7	362.2	257.8	175.3	120.5	91.6	81.8	77.0	77.8
17.5°	555.4	521.0	416.6	293.6	183.7	108.1	78.1	68.3	65.4	64.3	63.5
20°	542.2	498.8	371.3	231.5	121.2	74.9	64.3	61.0	59.9	59.2	59.2
22.5°	529.1	475.4	326.1	171.6	82.9	61.3	57.7	56.2	55.5	54.4	54.4
25°	517.0	452.8	280.8	120.1	63.5	54.8	52.2	50.8	49.3	48.2	48.2
27.5°	507.9	435.6	238.8	85.1	53.3	49.3	46.7	44.2	42.4	40.9	40.9
30°	502.1	418.8	198.3	64.3	47.5	43.8	40.5	37.2	34.3	32.5	32.1
32.5°	498.8	404.9	160.7	52.6	42.4	38.3	34.3	30.7	27.4	25.2	25.2
35°	500.2	394.0	123.1	44.5	38.3	33.6	29.2	24.8	21.9	20.1	19.7
37.5°	509.7	387.8	91.6	39.4	34.3	29.2	24.8	20.4	17.5	16.1	15.7
40°	527.6	389.2	69.7	35.8	31.4	25.6	20.4	16.8	14.2	12.8	12.8
42.5°	563.8	399.8	55.1	32.9	28.1	21.9	17.2	13.9	11.7	10.6	10.2
45°	611.6	419.9	45.3	30.3	24.8	18.6	14.6	11.7	9.5	8.4	8.4
47.5°	683.9	452.0	39.1	27.8	21.5	15.7	12.0	9.5	7.3	6.6	6.2
50°	767.5	496.9	34.3	24.8	19.0	13.1	10.2	7.3	5.8	4.7	4.7
52.5°	853.0	547.0	31.0	22.3	16.4	11.3	8.0	5.5	4.0	3.3	3.3
55°	931.5	589.0	27.8	20.1	13.9	9.5	6.6	4.4	2.9	2.2	2.2
57.5°	1007.4	627.3	24.1	17.5	11.3	7.7	5.1	3.3	2.2	1.5	1.5
60°	1102.7	677.0	20.8	15.0	9.1	6.2	4.0	2.6	1.5	1.1	0.7
62.5°	1217.7	713.1	17.5	12.0	7.3	4.7	2.9	1.8	1.1	0.4	0.4
65°	1260.1	665.3	14.6	9.9	5.8	3.7	2.2	1.5	0.7	0.4	0.4
67.5°	1141.8	536.0	11.7	7.7	4.4	2.6	1.8	1.1	0.7	0.4	0.4
68°	1108.9	509.7	11.3	7.3	4.0	2.6	1.5	1.1	0.4	0.4	0.0
70°	936.2	409.3	9.1	5.5	3.3	2.2	1.5	0.7	0.4	0.4	0.0
72.5°	694.1	282.2	6.6	3.7	2.2	1.5	1.1	0.7	0.4	0.4	0.0
75°	366.2	109.9	5.1	2.9	1.8	1.5	1.1	1.1	0.7	0.4	0.4
77.5°	105.2	34.7	4.0	2.2	1.8	1.8	1.8	1.5	1.5	1.1	0.7
80°	30.7	11.3	2.6	1.5	1.8	1.8	2.2	1.8	1.8	1.5	1.5
82.5°	16.4	4.4	1.5	1.1	1.1	1.5	1.8	1.5	1.1	0.7	0.4
85°	6.9	1.5	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4
87.5°	0.4	0.7	0.7	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)