

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: P401381

Luminaire Tested: **ENT-SA1C-827-U-SL4-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401381
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-SA1C-827-U-SL4-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA 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: 2721 lumens
Efficiency: N/A
Efficacy: 81.7 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): 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

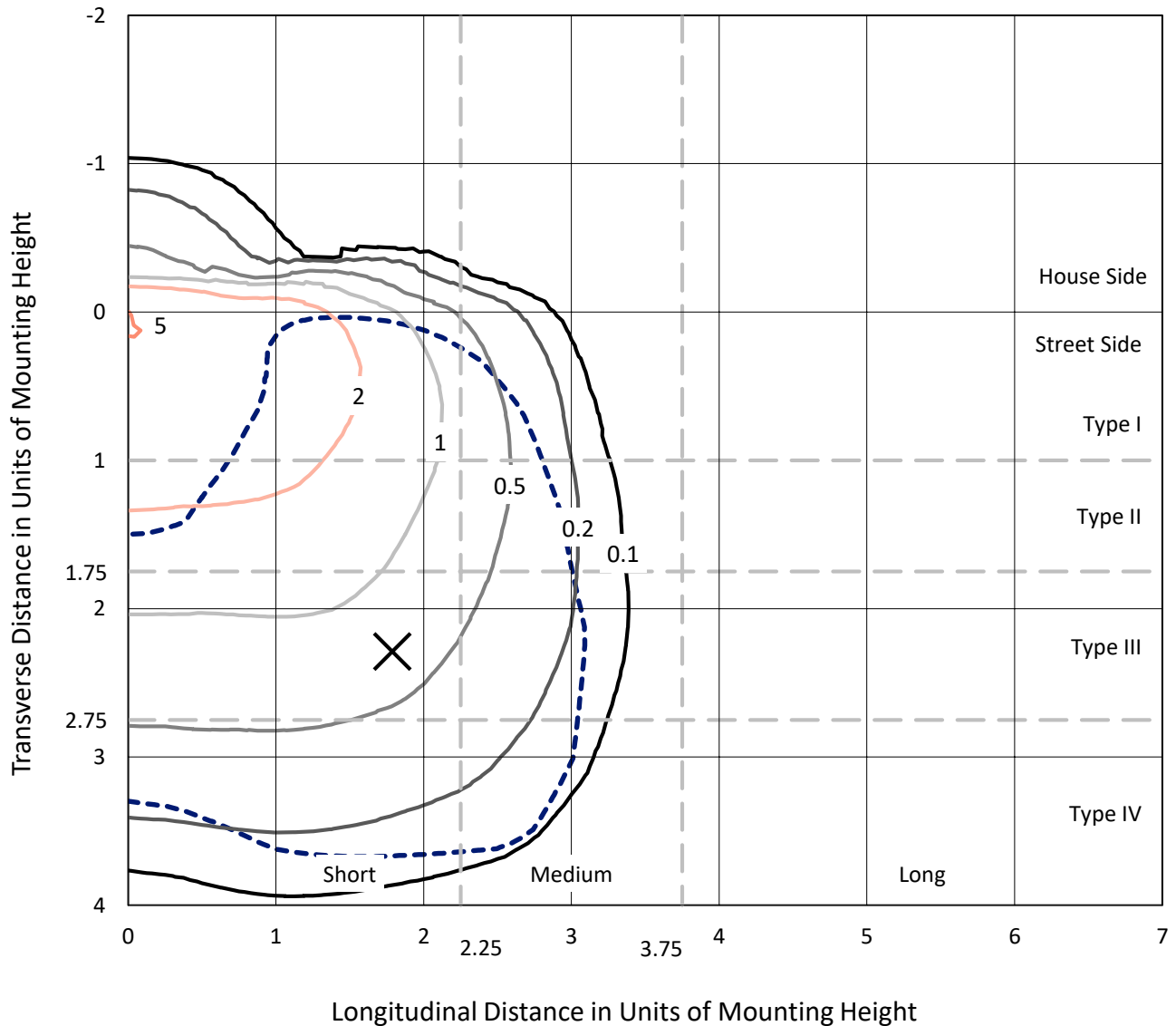


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

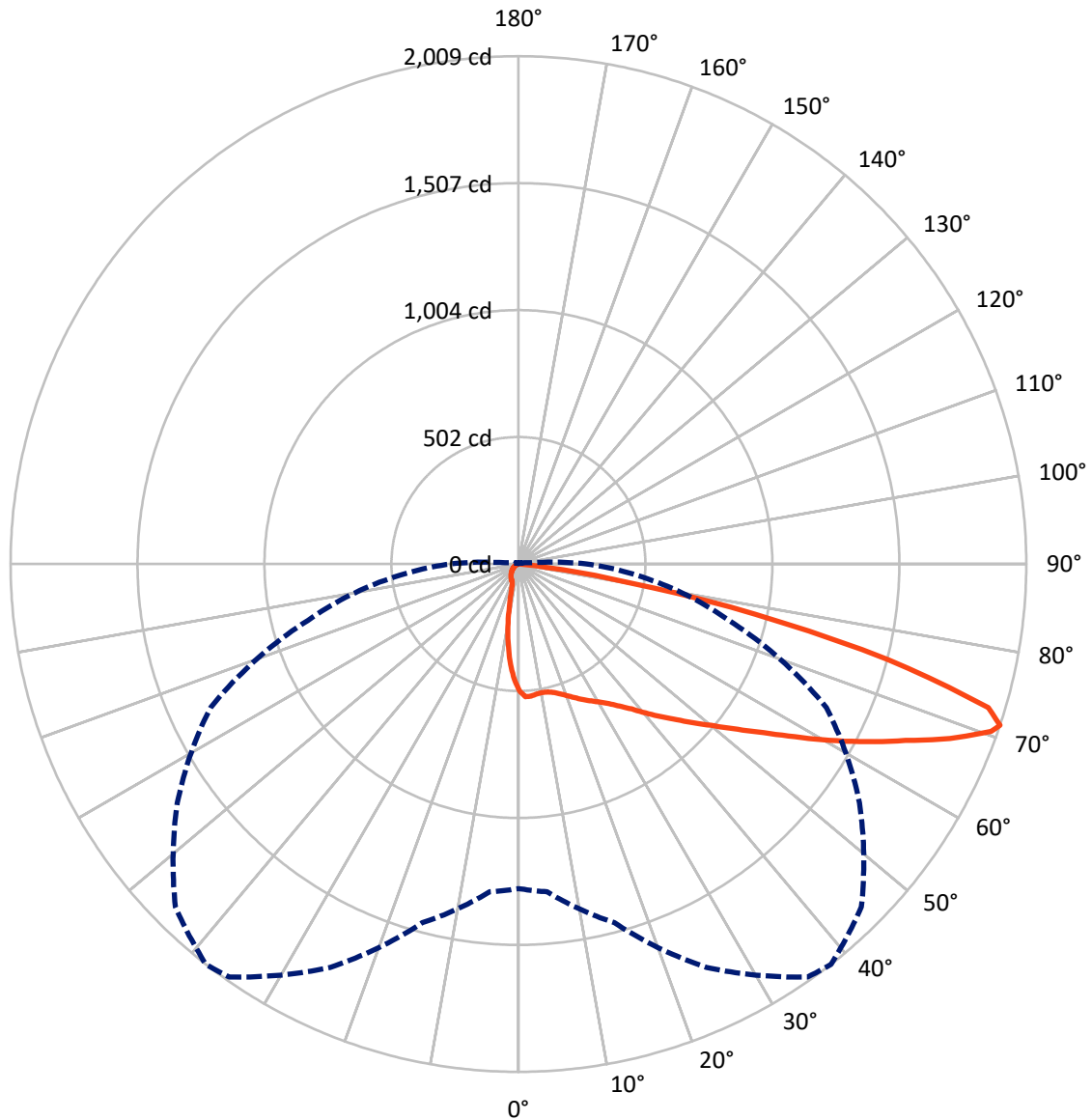


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Short - Semi-Cutoff

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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
House Side	Lumens	232.4	0.0	232.4
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	2488.6	0.0	2488.6
	% Fixture	91.5	0.0	91.5
Total	Lumens	2721.0	0.0	2721.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.4	1.6
10°-20°	102.6	3.8
20°-30°	164.5	6.0
30°-40°	250.2	9.2
40°-50°	390.0	14.3
50°-60°	570.3	21.0
60°-70°	731.5	26.9
70°-80°	447.1	16.4
80°-90°	22.4	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°	2721.0	100.0
0°-180°	2721.0	100.0



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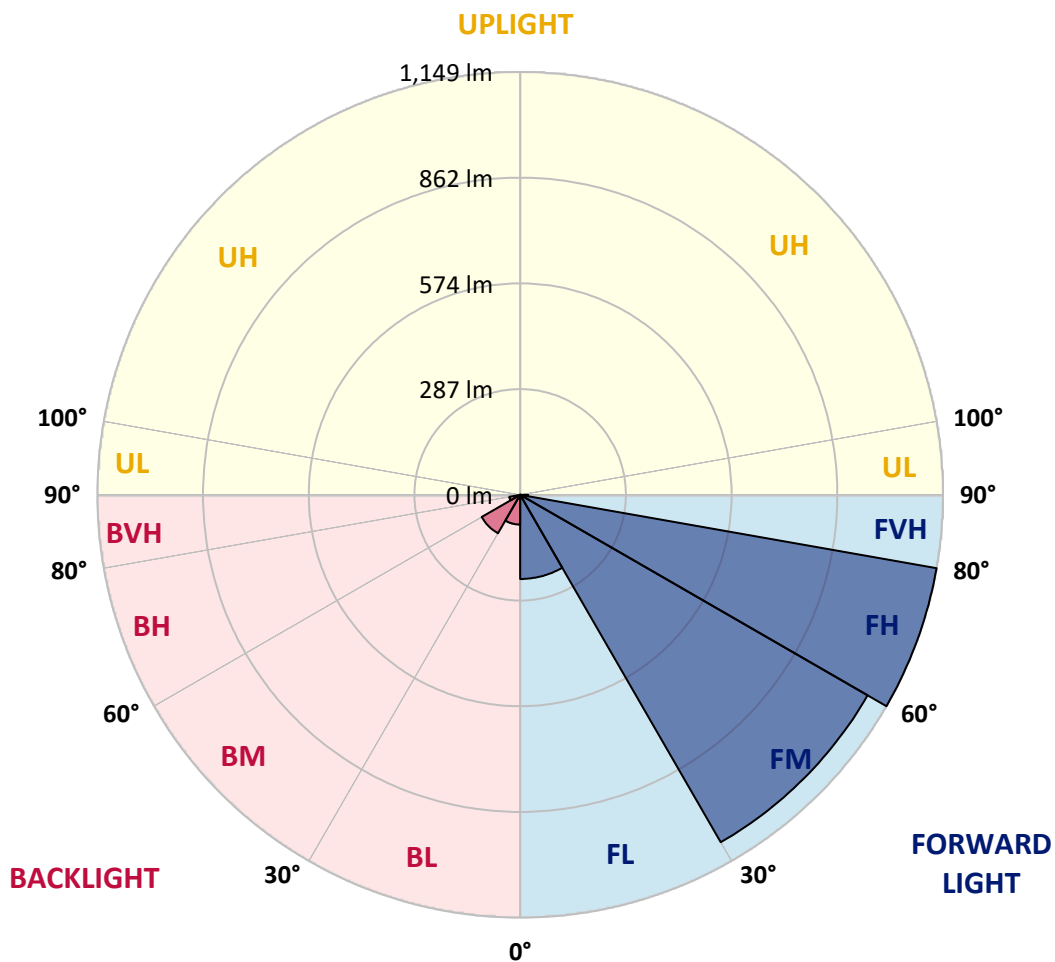
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	228.6	8.4			
FM	(30°-60°)	1089.8	40.1			
FH	(60°-80°)	1148.7	42.2			G1/1800
FVH	(80°-90°)	21.5	0.8			G1/100
BL	(0°-30°)	80.8	3.0	B0/110		
BM	(30°-60°)	120.7	4.4	B0/220		
BH	(60°-80°)	29.9	1.1	B0/110		G0/110
BVH	(80°-90°)	1.0	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°	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6
2.5°	531.3	529.9	531.3	529.9	527.1	525.7	523.8	518.6	513.9	508.2	499.7
5°	532.3	531.3	531.3	529.4	526.1	524.7	522.8	517.7	511.5	503.0	490.3
7.5°	527.1	526.6	525.7	523.8	520.0	519.1	517.7	511.5	505.4	496.4	480.9
10°	518.6	519.5	519.1	519.1	517.7	516.7	515.8	508.7	502.1	491.7	475.2
12.5°	510.6	511.5	513.9	517.7	519.1	519.5	519.5	512.5	504.5	493.1	476.2
15°	505.4	507.3	513.9	521.4	525.7	527.1	528.5	521.0	511.5	499.3	481.3
17.5°	504.0	506.8	519.5	531.3	539.3	540.3	540.3	530.9	521.0	506.8	487.5
20°	508.7	512.5	529.0	545.5	555.4	556.3	554.4	542.2	530.4	514.8	492.7
22.5°	522.8	526.1	545.0	564.3	573.8	574.7	570.5	553.5	540.8	528.0	499.7
25°	547.4	549.2	569.5	587.9	593.1	594.5	587.4	567.2	552.5	540.8	509.6
27.5°	579.9	580.8	599.2	612.9	613.8	613.4	605.8	584.6	570.0	560.1	524.7
30°	613.8	615.2	630.3	639.3	635.5	633.6	627.0	604.4	591.2	583.7	546.4
32.5°	645.4	646.8	663.3	668.0	659.6	658.1	653.4	629.4	618.1	621.8	577.5
35°	676.5	676.5	695.4	697.7	690.2	690.2	690.2	661.4	659.6	672.3	620.9
37.5°	704.3	709.1	728.9	727.9	726.5	727.4	730.3	708.6	715.2	736.9	677.9
40°	727.9	734.0	760.4	762.8	768.9	774.1	778.4	767.0	782.6	818.0	751.0
42.5°	749.1	756.2	790.1	801.0	818.0	825.0	833.1	830.2	864.6	929.2	844.4
45°	776.5	784.0	818.9	844.8	868.4	877.8	895.8	908.0	965.1	1038.6	945.3
47.5°	812.8	818.0	850.0	891.0	923.1	940.1	967.9	999.5	1068.8	1154.6	1035.3
50°	862.3	862.8	886.8	940.1	987.7	1006.1	1054.2	1095.2	1181.9	1256.9	1100.4
52.5°	917.0	914.1	933.0	1000.4	1060.8	1085.7	1142.3	1199.4	1286.6	1330.9	1129.6
55°	968.8	970.2	982.0	1064.5	1152.7	1176.7	1248.4	1306.4	1382.3	1376.2	1145.6
57.5°	1028.7	1028.2	1043.3	1134.8	1260.2	1288.0	1363.0	1410.6	1440.3	1408.7	1148.4
60°	1085.3	1083.9	1107.0	1218.7	1374.7	1415.8	1483.2	1481.3	1498.3	1429.4	1146.1
62.5°	1135.7	1139.0	1179.6	1316.3	1503.0	1547.3	1581.2	1557.7	1562.4	1453.5	1116.9
65°	1197.0	1203.1	1268.7	1434.6	1661.4	1682.6	1695.8	1657.6	1610.5	1434.1	1028.2
67.5°	1274.3	1292.7	1385.1	1609.1	1826.4	1841.0	1841.5	1718.0	1608.6	1336.6	864.6
70°	1305.0	1324.3	1471.4	1747.2	1965.5	1983.9	1926.3	1708.5	1481.8	1046.6	583.7
71°	1283.8	1301.2	1469.0	1760.4	1994.2	2008.8	1918.8	1646.8	1343.6	862.3	452.1
72.5°	1130.5	1175.8	1378.5	1677.4	1942.8	1943.3	1796.7	1501.1	1068.8	538.4	227.2
75°	610.5	665.2	1010.3	1276.7	1498.7	1510.5	1382.3	1042.4	517.2	139.5	55.2
77.5°	201.3	226.8	453.1	662.9	940.1	958.5	845.3	463.0	163.1	47.1	28.8
80°	126.3	129.2	153.2	278.6	418.2	433.7	347.9	187.6	73.5	25.9	19.8
82.5°	21.2	25.5	72.1	82.0	147.6	116.9	79.2	95.7	34.4	11.8	17.0
85°	0.0	0.0	0.5	0.5	2.4	0.5	0.5	19.3	1.9	1.9	9.0
87.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	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°	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6	501.6
2.5°	496.0	492.2	484.6	476.6	466.7	458.2	455.4	449.3	446.5	444.1	444.1
5°	482.3	475.7	459.7	443.2	427.1	410.2	394.6	380.0	372.9	363.0	367.7
7.5°	471.0	459.7	437.0	411.1	378.1	344.6	318.7	296.1	277.2	271.1	266.8
10°	463.0	448.8	415.8	376.2	328.1	280.5	240.4	203.2	181.5	168.3	168.3
12.5°	462.0	444.1	401.2	340.4	271.1	206.5	157.0	121.6	104.2	96.2	95.7
15°	465.3	443.6	388.0	307.9	218.8	143.3	98.1	82.5	78.3	77.3	77.3
17.5°	468.1	443.2	372.4	271.1	161.2	94.3	77.8	75.0	74.0	73.5	73.5
20°	471.0	440.8	354.5	229.6	114.1	76.8	72.6	71.2	70.7	70.2	70.2
22.5°	474.7	438.4	336.1	182.5	84.4	71.7	69.3	67.9	67.4	67.4	67.4
25°	479.9	437.0	313.5	138.1	72.6	67.9	65.5	64.6	64.6	64.1	64.1
27.5°	489.8	438.4	289.0	99.0	67.9	64.1	62.7	61.8	61.8	61.3	61.3
30°	503.5	442.7	258.4	77.3	64.1	60.3	58.9	58.5	58.0	58.0	58.0
32.5°	522.8	449.3	224.9	66.0	59.4	56.6	55.2	54.7	54.7	54.7	54.2
35°	552.5	463.0	183.9	60.3	55.2	52.3	50.9	50.9	50.9	50.4	50.9
37.5°	597.8	485.1	142.4	55.6	50.4	48.1	47.1	46.7	46.7	46.7	46.7
40°	654.8	521.0	103.7	51.4	46.2	43.8	42.9	42.4	42.0	42.0	42.0
42.5°	728.4	560.6	75.4	46.7	42.4	40.1	39.1	38.2	37.2	36.8	36.8
45°	804.8	607.7	58.9	42.9	38.7	36.8	35.8	34.4	33.0	31.6	31.6
47.5°	878.8	644.0	50.4	38.7	35.4	33.5	32.5	30.6	28.3	26.9	26.9
50°	925.5	655.3	45.3	34.9	32.1	30.6	29.2	26.9	23.6	22.2	22.2
52.5°	940.1	634.6	40.5	31.6	29.2	27.8	25.9	22.6	19.3	17.4	17.4
55°	945.7	594.5	35.8	29.2	26.4	24.5	22.2	18.9	15.6	13.7	13.7
57.5°	938.7	537.9	32.1	26.4	23.6	21.7	18.9	15.1	11.8	10.4	10.4
60°	914.6	455.9	28.8	23.6	20.7	18.4	15.6	11.8	9.0	7.1	7.5
62.5°	849.6	352.6	25.0	19.8	17.9	15.6	12.3	9.0	5.7	4.7	4.7
65°	745.8	244.2	21.2	16.5	15.1	12.7	9.4	6.1	3.3	2.8	2.8
67.5°	605.8	157.9	16.5	13.7	12.7	10.4	7.1	3.8	1.9	1.9	1.4
70°	380.5	78.3	13.2	10.4	10.4	8.0	5.2	2.4	1.4	1.4	1.4
71°	269.2	53.3	11.8	9.4	9.4	7.5	4.7	1.9	1.4	1.4	1.4
72.5°	121.6	33.5	9.9	8.5	8.0	6.1	4.2	1.9	1.9	1.9	1.9
75°	38.2	18.4	7.1	6.6	6.6	5.2	3.8	2.4	2.4	2.4	2.4
77.5°	25.5	14.1	4.7	4.2	5.2	5.2	3.8	2.8	2.8	2.8	2.8
80°	20.7	7.5	2.8	2.8	3.8	4.7	3.8	2.8	3.3	2.8	2.8
82.5°	20.3	3.8	0.9	1.4	2.4	2.8	2.8	2.4	2.8	2.8	2.8
85°	8.5	0.9	0.5	0.9	0.9	1.4	1.4	1.9	2.4	2.4	2.4
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.9	0.9	1.4	1.9	1.9
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)