

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: P401397

Luminaire Tested: **ENT-SA1C-830-U-SL3-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401397
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-SA1C-830-U-SL3-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA 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: 3004 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-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

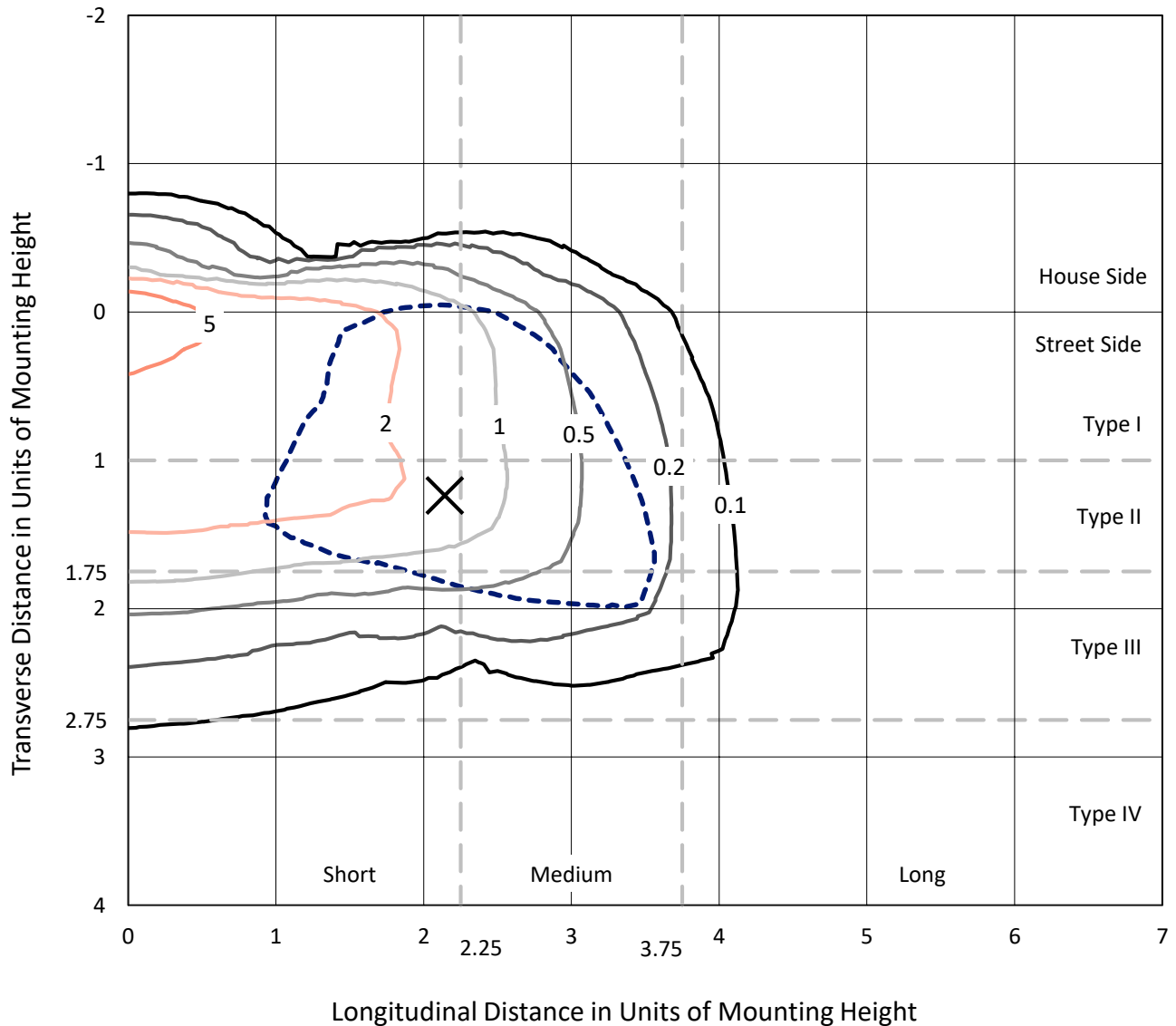


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Iso-Footcandle Lines of Horizontal Illumination

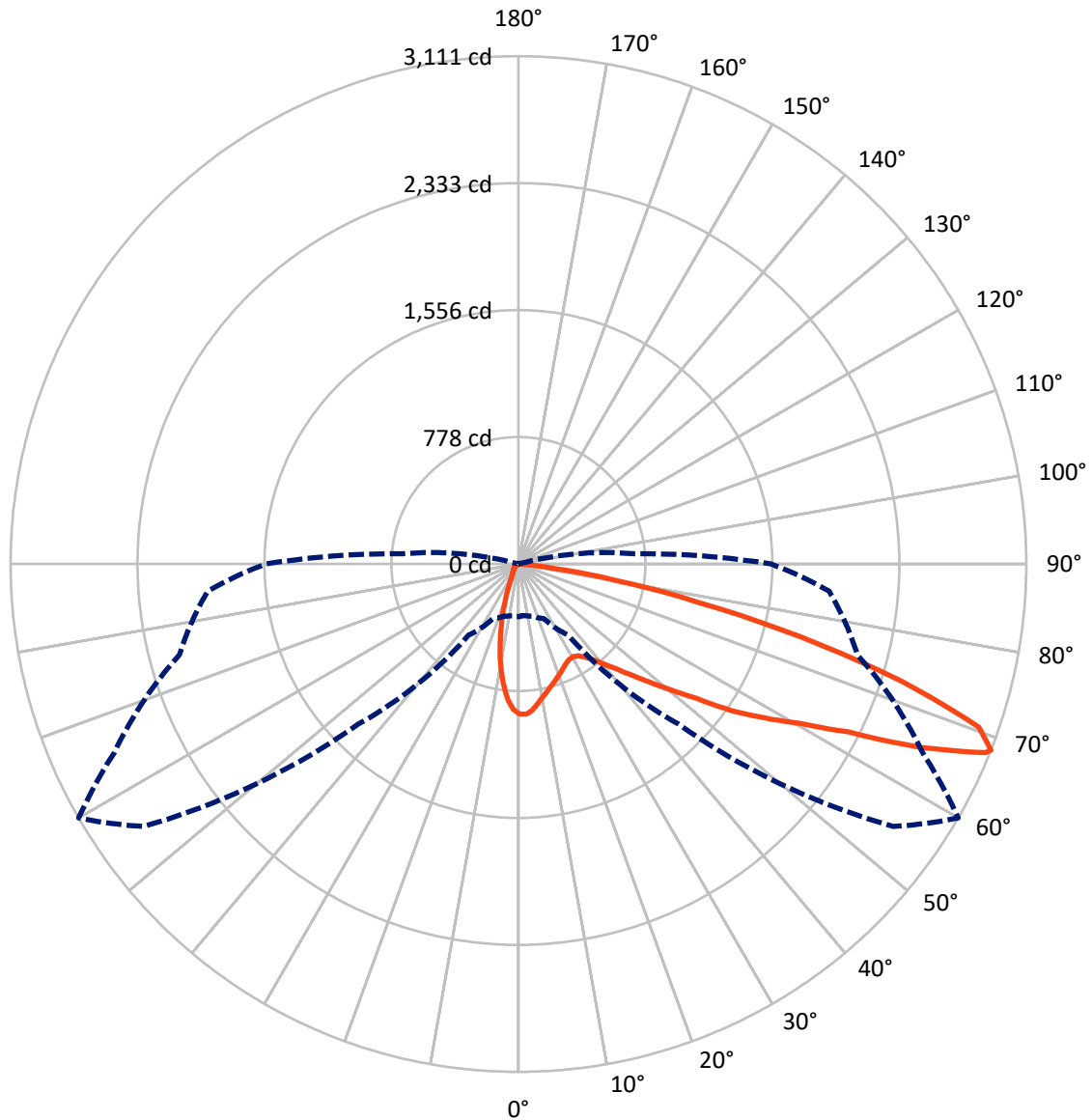
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.2 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	335.8	0.0	335.8
	% Fixture	11.2	0.0	11.2
Street Side	Lumens	2668.1	0.0	2668.1
	% Fixture	88.8	0.0	88.8
Total	Lumens	3004.0	0.0	3004.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	2.5
10°-20°	152.2	5.1
20°-30°	200.4	6.7
30°-40°	276.5	9.2
40°-50°	419.2	14.0
50°-60°	676.4	22.5
60°-70°	803.5	26.7
70°-80°	378.7	12.6
80°-90°	22.6	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°	3004.0	100.0
0°-180°	3004.0	100.0



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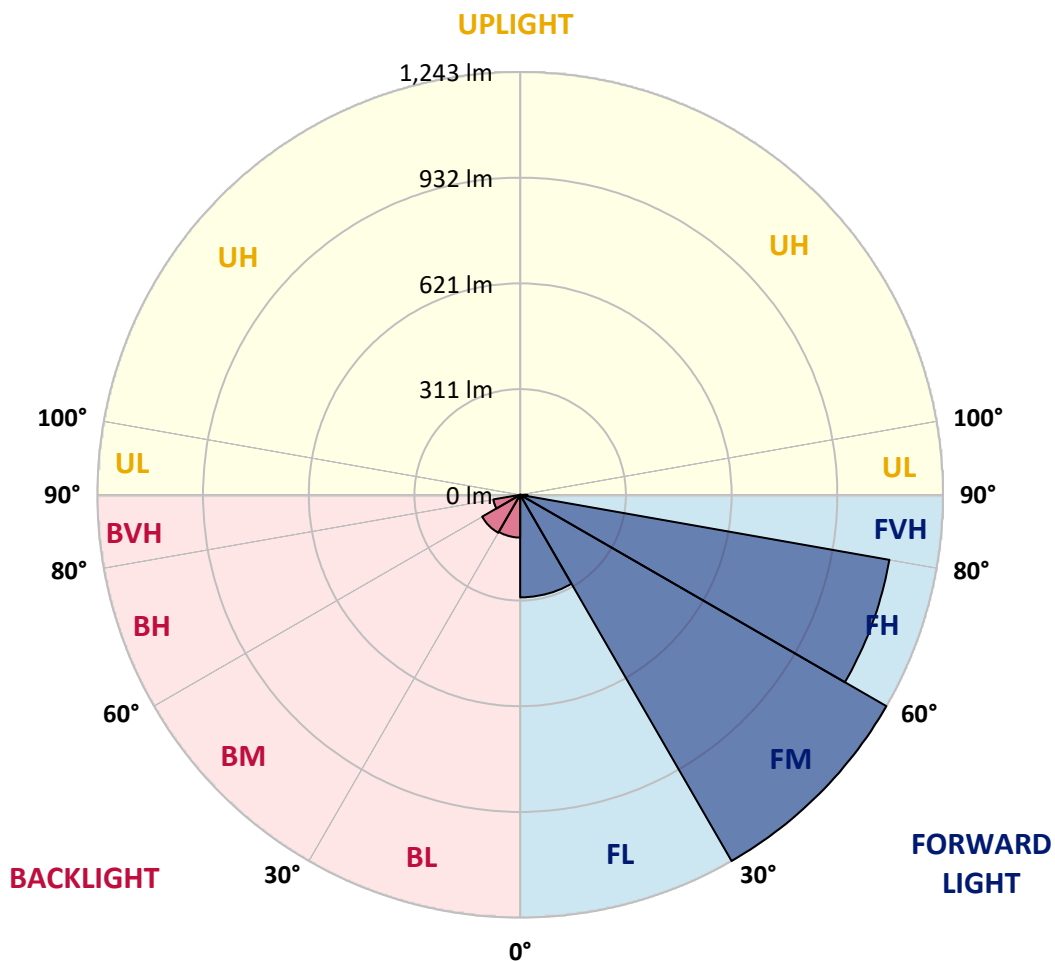
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	301.5	10.0			
FM	(30°-60°)	1242.9	41.4			
FH	(60°-80°)	1102.1	36.7			G1/1800
FVH	(80°-90°)	21.6	0.7			G1/100
BL	(0°-30°)	125.7	4.2	B1/500		
BM	(30°-60°)	129.1	4.3	B0/220		
BH	(60°-80°)	80.1	2.7	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: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	911.3	909.3	914.9	916.4	918.0	921.0	920.5	921.0	921.5	920.5	914.4
5°	849.2	852.7	857.8	864.4	871.1	886.4	892.5	898.6	902.7	905.7	900.1
7.5°	788.0	795.1	799.2	811.4	821.6	837.4	850.7	861.4	871.6	882.8	877.2
10°	739.1	741.6	745.2	756.4	771.7	795.6	813.0	826.2	838.4	857.3	852.7
12.5°	691.1	692.7	699.8	712.0	727.8	757.4	780.3	795.6	809.4	832.8	833.4
15°	656.0	656.5	661.1	672.3	690.6	722.2	751.8	768.6	788.0	816.5	818.1
17.5°	633.0	632.5	633.6	640.7	658.0	688.1	723.8	743.6	766.6	803.3	804.8
20°	625.9	624.9	622.8	621.3	632.0	658.0	698.3	720.2	747.2	793.6	794.1
22.5°	632.0	630.0	625.4	616.7	619.8	636.6	670.2	696.8	729.9	788.5	784.9
25°	646.8	646.8	640.7	626.9	619.8	623.4	650.4	675.9	712.6	786.0	778.3
27.5°	671.3	670.2	662.1	647.8	634.6	624.9	638.1	662.1	699.8	789.0	775.2
30°	700.8	697.8	689.1	678.9	662.6	641.7	640.7	658.5	693.7	798.7	777.3
32.5°	728.9	728.9	725.3	715.6	699.8	672.3	656.5	670.8	701.3	814.5	783.9
35°	763.5	763.0	764.0	760.5	746.7	717.7	692.2	699.3	724.8	841.0	799.7
37.5°	791.0	791.6	800.2	806.3	800.2	769.6	743.1	743.1	764.5	880.8	826.7
40°	818.1	819.1	835.4	853.2	854.8	830.3	804.8	804.3	816.5	929.7	868.5
42.5°	842.5	846.6	870.1	900.6	918.5	902.2	883.3	877.2	883.3	1003.6	936.3
45°	868.5	876.7	909.3	953.6	982.7	983.2	976.1	968.9	972.0	1086.7	1027.0
47.5°	902.2	911.3	952.1	1006.6	1061.7	1076.0	1082.6	1080.0	1071.9	1191.7	1144.3
50°	956.7	965.4	1003.6	1064.8	1140.2	1191.7	1209.5	1212.6	1201.9	1307.9	1277.3
52.5°	1049.5	1054.6	1090.2	1138.7	1223.3	1319.6	1366.5	1367.0	1343.0	1444.0	1421.0
55°	1148.9	1162.1	1203.9	1260.0	1347.1	1455.2	1572.4	1585.2	1511.2	1563.2	1526.0
57.5°	1150.4	1163.1	1232.4	1340.0	1522.5	1665.7	1770.2	1779.3	1697.3	1659.1	1624.9
60°	1029.1	1035.7	1132.0	1289.5	1585.2	1949.6	1995.5	1981.7	1827.8	1757.9	1748.8
62.5°	726.3	729.4	843.5	1051.0	1446.5	2085.2	2338.5	2264.6	2013.3	1903.7	1934.3
65°	457.2	455.7	503.1	668.7	1076.0	1951.6	2762.6	2708.5	2354.3	2086.2	2079.0
67.5°	337.4	329.3	342.0	393.5	614.7	1532.1	2840.5	3084.2	2679.0	2162.1	1953.7
68°	323.7	316.5	329.8	369.5	531.6	1386.9	2802.8	3111.2	2730.4	2149.9	1910.8
70°	274.7	268.1	279.3	309.4	370.0	900.1	2473.0	2991.4	2777.3	2045.9	1684.0
72.5°	195.2	198.8	228.3	265.6	313.5	461.8	1821.1	2456.7	2388.9	1819.6	1281.4
75°	115.7	122.3	161.1	214.1	288.0	304.8	1174.8	1786.0	1752.8	1260.0	694.2
77.5°	40.8	43.3	80.0	142.7	237.5	241.6	654.4	1122.9	1044.4	514.8	204.9
80°	14.8	14.8	29.6	79.5	153.4	184.5	347.6	599.4	412.3	133.5	56.6
82.5°	2.5	2.5	6.6	27.0	67.8	98.4	161.6	213.1	122.3	29.6	28.0
85°	0.0	0.0	0.0	0.0	1.0	1.0	47.4	47.9	22.4	4.1	12.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.0	1.0	1.0	1.5
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°	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5	919.5
2.5°	911.8	910.8	905.2	895.0	886.4	872.1	869.5	855.8	850.7	846.6	850.7
5°	896.0	890.4	871.6	848.6	817.6	780.9	759.4	729.9	723.8	707.5	717.1
7.5°	870.1	857.3	822.1	772.7	715.6	659.5	616.7	575.4	540.3	528.0	524.5
10°	842.5	824.7	765.6	689.1	606.5	520.4	456.7	397.1	363.9	332.8	331.8
12.5°	816.5	789.5	703.9	597.4	482.2	379.7	297.2	234.5	195.2	173.8	179.4
15°	795.6	759.4	641.7	505.6	359.8	244.7	168.2	127.9	114.2	107.5	108.6
17.5°	775.2	727.3	581.6	409.8	256.4	150.9	109.1	95.3	91.2	89.7	88.7
20°	756.9	696.2	518.4	323.1	169.2	104.5	89.7	85.1	83.6	82.6	82.6
22.5°	738.5	663.6	455.2	239.6	115.7	85.6	80.5	78.5	77.5	75.9	75.9
25°	721.7	632.0	392.0	167.7	88.7	76.5	72.9	70.8	68.8	67.3	67.3
27.5°	709.0	608.1	333.3	118.8	74.4	68.8	65.2	61.7	59.1	57.1	57.1
30°	700.8	584.6	276.8	89.7	66.3	61.2	56.6	52.0	47.9	45.4	44.9
32.5°	696.2	565.3	224.3	73.4	59.1	53.5	47.9	42.8	38.2	35.2	35.2
35°	698.3	550.0	171.8	62.2	53.5	46.9	40.8	34.7	30.6	28.0	27.5
37.5°	711.5	541.3	127.9	55.0	47.9	40.8	34.7	28.5	24.5	22.4	21.9
40°	736.5	543.3	97.4	50.0	43.8	35.7	28.5	23.4	19.9	17.8	17.8
42.5°	787.0	558.1	77.0	45.9	39.2	30.6	24.0	19.4	16.3	14.8	14.3
45°	853.7	586.1	63.2	42.3	34.7	26.0	20.4	16.3	13.3	11.7	11.7
47.5°	954.7	631.0	54.5	38.7	30.1	21.9	16.8	13.3	10.2	9.2	8.7
50°	1071.4	693.7	47.9	34.7	26.5	18.3	14.3	10.2	8.2	6.6	6.6
52.5°	1190.6	763.5	43.3	31.1	22.9	15.8	11.2	7.6	5.6	4.6	4.6
55°	1300.2	822.1	38.7	28.0	19.4	13.3	9.2	6.1	4.1	3.1	3.1
57.5°	1406.3	875.7	33.6	24.5	15.8	10.7	7.1	4.6	3.1	2.0	2.0
60°	1539.3	945.0	29.1	20.9	12.7	8.7	5.6	3.6	2.0	1.5	1.0
62.5°	1699.8	995.4	24.5	16.8	10.2	6.6	4.1	2.5	1.5	0.5	0.5
65°	1759.0	928.7	20.4	13.8	8.2	5.1	3.1	2.0	1.0	0.5	0.5
67.5°	1593.8	748.2	16.3	10.7	6.1	3.6	2.5	1.5	1.0	0.5	0.5
68°	1547.9	711.5	15.8	10.2	5.6	3.6	2.0	1.5	0.5	0.5	0.0
70°	1306.9	571.4	12.7	7.6	4.6	3.1	2.0	1.0	0.5	0.5	0.0
72.5°	968.9	394.0	9.2	5.1	3.1	2.0	1.5	1.0	0.5	0.5	0.0
75°	511.2	153.4	7.1	4.1	2.5	2.0	1.5	1.5	1.0	0.5	0.5
77.5°	146.8	48.4	5.6	3.1	2.5	2.5	2.5	2.0	2.0	1.5	1.0
80°	42.8	15.8	3.6	2.0	2.5	2.5	3.1	2.5	2.5	2.0	2.0
82.5°	22.9	6.1	2.0	1.5	1.5	2.0	2.5	2.0	1.5	1.0	0.5
85°	9.7	2.0	1.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
87.5°	0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)