

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: P401575

Luminaire Tested: **ENV-SA1D-830-U-SL2-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1D-830-U-SL2-HSS
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3626 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

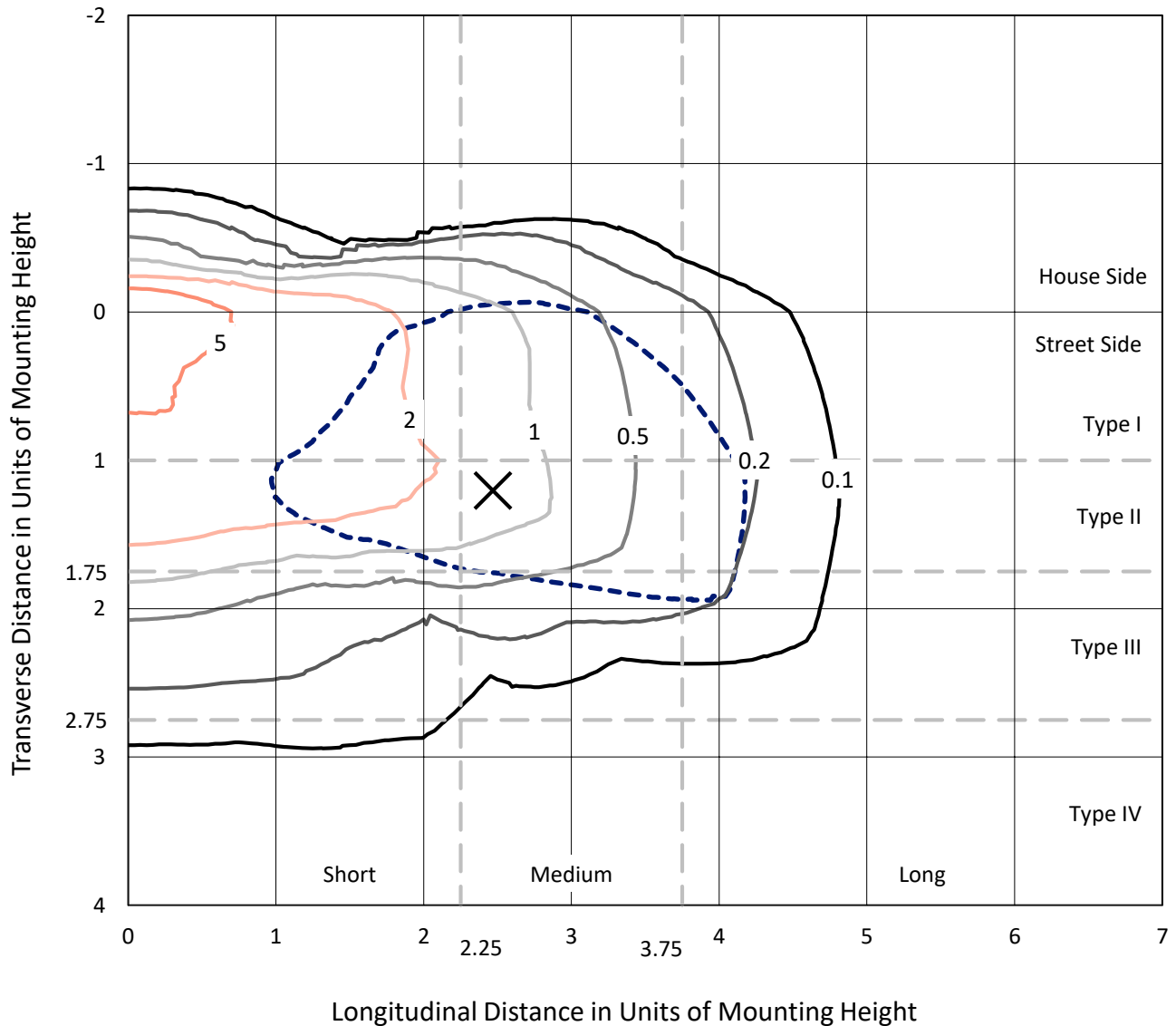
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

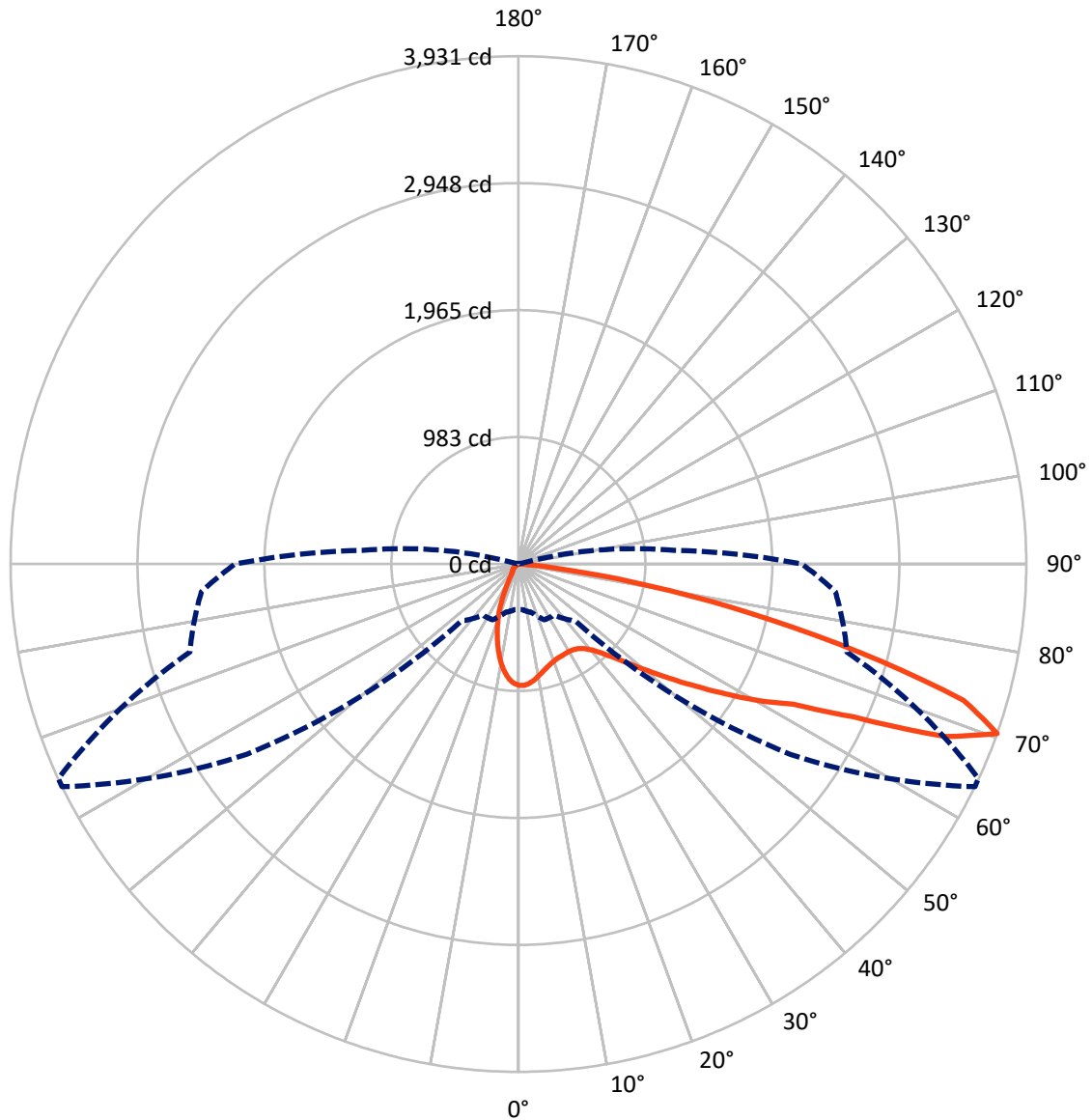
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	465.8	0.0	465.8
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	3160.2	0.0	3160.2
	% Fixture	87.2	0.0	87.2
Total	Lumens	3626.0	0.0	3626.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.1	2.2
10°-20°	175.5	4.8
20°-30°	241.7	6.7
30°-40°	332.9	9.2
40°-50°	496.1	13.7
50°-60°	783.8	21.6
60°-70°	888.1	24.5
70°-80°	583.1	16.1
80°-90°	45.7	1.3
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°	3626.0	100.0
0°-180°	3626.0	100.0



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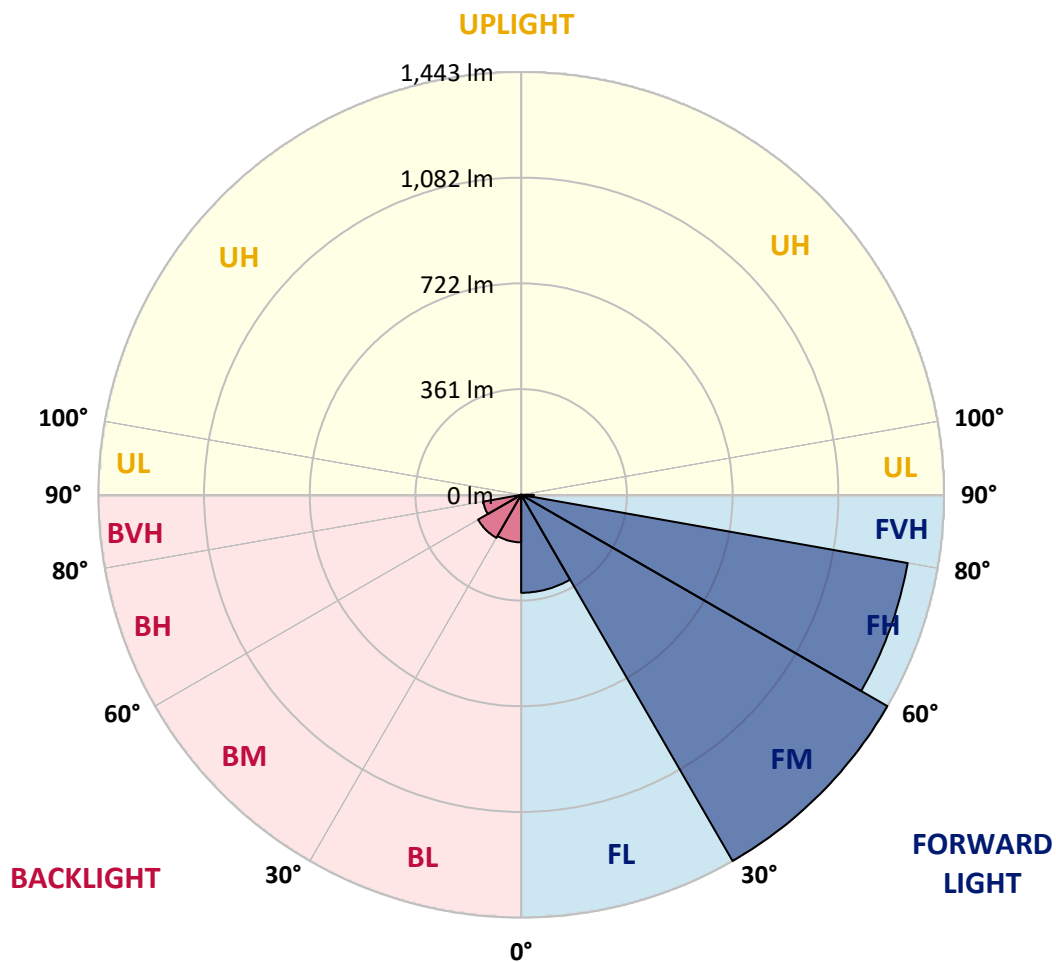
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	334.2	9.2			
FM	(30°-60°)	1443.1	39.8			
FH	(60°-80°)	1339.7	36.9			G1/1800
FVH	(80°-90°)	43.2	1.2			G1/100
BL	(0°-30°)	162.1	4.5	B1/500		
BM	(30°-60°)	169.6	4.7	B0/220		
BH	(60°-80°)	131.5	3.6	B1/500		G1/500
BVH	(80°-90°)	2.5	0.1			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6
2.5°	912.5	912.5	917.0	921.4	924.0	931.0	936.1	939.9	939.9	942.5	938.0
5°	851.9	851.9	855.7	866.6	878.1	892.7	909.3	925.9	929.1	941.2	940.5
7.5°	795.8	800.9	807.3	818.1	830.2	851.9	874.9	903.6	906.8	936.1	942.5
10°	756.9	760.1	763.9	776.0	793.9	818.8	843.6	877.4	883.2	927.2	942.5
12.5°	725.7	726.3	732.0	745.4	762.6	786.9	814.9	851.9	858.9	911.2	939.9
15°	703.3	702.7	709.1	721.8	738.4	763.3	790.7	829.6	837.2	897.8	939.3
17.5°	689.9	690.6	695.7	705.3	721.2	744.8	772.8	811.1	818.8	887.0	942.5
20°	689.9	689.9	693.1	697.6	709.7	730.8	758.2	797.7	805.4	880.0	946.9
22.5°	703.3	702.1	704.6	700.8	706.5	721.2	749.2	788.8	797.1	876.8	953.9
25°	727.6	725.0	726.9	718.6	712.3	718.6	743.5	785.0	793.9	877.4	960.3
27.5°	761.4	761.4	757.5	746.1	730.1	723.1	742.9	782.4	791.3	877.4	964.8
30°	808.6	806.6	800.9	789.4	764.6	741.0	749.2	782.4	791.3	878.1	966.1
32.5°	855.7	857.0	860.2	848.7	814.9	771.6	764.6	788.1	795.8	877.4	964.1
35°	903.6	904.2	918.2	919.5	876.1	820.7	790.7	803.5	808.6	883.8	965.4
37.5°	945.6	948.8	976.3	989.6	953.9	883.8	832.1	832.1	834.7	901.0	973.1
40°	992.8	1001.1	1034.3	1064.3	1050.2	964.8	892.7	874.2	875.5	932.3	990.3
42.5°	1047.7	1057.9	1101.2	1144.6	1144.0	1064.3	969.2	941.2	942.5	986.5	1025.4
45°	1117.2	1124.2	1179.0	1233.2	1244.7	1173.9	1065.5	1028.5	1029.8	1068.7	1093.6
47.5°	1202.0	1210.3	1263.2	1328.2	1357.6	1305.9	1190.5	1150.3	1146.5	1173.9	1191.8
50°	1312.9	1328.9	1360.1	1422.6	1493.4	1459.0	1337.2	1297.0	1291.9	1313.6	1319.3
52.5°	1418.8	1433.5	1446.2	1503.6	1640.7	1649.0	1517.0	1473.0	1467.9	1473.0	1480.0
55°	1434.7	1443.0	1452.6	1530.4	1759.9	1890.7	1721.7	1669.4	1654.7	1645.2	1668.8
57.5°	1307.8	1302.7	1334.6	1440.5	1779.7	2157.8	1998.4	1897.0	1883.0	1830.1	1806.5
60°	1035.6	1028.5	1058.5	1203.3	1668.8	2290.5	2382.3	2148.9	2114.5	1937.2	1914.3
62.5°	727.6	719.3	758.2	843.6	1294.4	2264.3	2815.3	2387.4	2319.2	2032.2	2001.0
65°	560.5	556.7	577.7	596.8	790.1	1961.4	3053.7	2852.9	2712.0	2135.5	2095.3
67.5°	439.3	444.4	470.6	526.1	510.1	1222.4	3031.4	3563.2	3422.3	2325.5	2300.0
70°	353.3	354.5	387.1	475.7	481.4	622.4	2566.6	3930.5	3928.6	2632.3	2462.6
72.5°	213.6	219.4	272.3	411.3	485.9	476.3	1725.5	3601.5	3651.2	2703.7	2221.0
75°	102.7	108.4	140.9	276.1	482.7	463.6	933.5	2726.6	2790.4	2424.4	1800.7
77.5°	38.3	43.4	65.0	135.2	357.7	424.7	491.0	1838.4	1888.7	1774.6	1219.8
80°	12.1	14.0	25.5	61.9	181.7	350.7	316.3	1036.8	1070.6	776.7	410.0
82.5°	1.3	1.9	7.0	21.0	70.1	178.5	185.6	390.2	407.5	151.8	82.9
85°	0.0	0.0	0.0	0.0	1.3	1.3	45.9	74.6	61.2	14.7	24.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.9	1.9	1.9	2.6
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°	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6
2.5°	937.4	937.4	932.9	925.9	917.0	904.2	901.0	890.8	890.8	882.5	881.2
5°	938.6	934.8	920.1	898.5	868.5	836.0	815.6	793.2	774.1	762.0	763.3
7.5°	938.6	930.3	901.0	853.2	797.1	741.0	698.2	648.5	625.5	610.2	617.3
10°	936.1	922.1	871.0	798.3	709.7	631.9	561.8	504.4	464.9	448.3	434.2
12.5°	930.3	909.9	833.4	730.1	616.6	514.6	417.7	342.4	290.1	264.0	260.8
15°	925.2	897.2	789.4	655.5	511.4	378.1	269.7	197.7	153.0	142.8	144.1
17.5°	924.0	885.1	747.3	576.4	408.7	251.9	155.6	125.6	119.2	116.7	116.1
20°	924.6	874.2	701.4	498.0	289.5	156.9	118.0	111.0	108.4	107.1	106.5
22.5°	927.2	862.1	656.2	415.8	197.7	114.8	105.2	100.8	97.6	95.6	95.0
25°	927.2	848.7	605.8	328.4	129.4	100.8	94.4	88.6	84.2	81.6	81.6
27.5°	925.2	833.4	553.5	249.3	102.7	89.9	82.9	75.2	69.5	66.3	66.3
30°	919.5	814.9	503.1	174.1	89.9	80.3	71.4	61.9	54.8	51.7	50.4
32.5°	911.2	795.2	445.1	122.4	81.0	70.1	59.9	49.7	43.4	39.5	39.5
35°	902.3	775.4	382.6	93.7	73.3	61.9	50.4	40.2	34.4	31.9	31.2
37.5°	897.8	754.4	321.4	81.0	65.7	52.9	40.8	32.5	28.1	26.1	25.5
40°	901.0	738.4	261.4	72.7	58.7	44.6	33.8	27.4	23.6	21.0	21.0
42.5°	920.1	729.5	204.7	66.3	52.3	37.6	28.1	22.3	18.5	16.6	16.6
45°	959.0	735.9	155.6	60.6	44.6	31.2	23.6	17.9	14.0	12.1	12.1
47.5°	1024.1	761.4	118.0	55.5	38.3	25.5	19.1	14.0	10.8	9.6	8.9
50°	1119.1	811.7	92.5	50.4	31.9	21.7	15.9	10.8	8.3	7.0	7.0
52.5°	1256.2	899.1	79.1	44.6	26.1	17.9	12.8	8.3	6.4	5.1	5.1
55°	1424.5	1010.1	71.4	39.5	21.0	14.7	10.2	6.4	4.5	3.8	3.2
57.5°	1561.0	1098.0	67.0	34.4	17.9	12.8	7.7	5.1	3.8	2.6	2.6
60°	1681.5	1154.8	59.3	28.7	15.3	10.2	6.4	3.8	2.6	1.9	1.9
62.5°	1779.1	1191.8	49.1	23.0	12.8	8.3	5.1	3.2	2.6	1.9	1.9
65°	1890.0	1221.8	40.2	17.9	10.8	7.0	4.5	2.6	1.9	1.9	1.9
67.5°	2107.5	1288.7	30.0	14.0	8.3	5.7	3.8	2.6	1.9	1.3	1.3
70°	2192.3	1210.3	23.6	11.5	6.4	5.1	3.8	2.6	1.3	1.3	1.3
72.5°	1865.8	906.1	18.5	9.6	5.7	4.5	3.8	2.6	1.9	1.9	1.3
75°	1480.0	612.2	14.7	7.7	5.7	5.1	3.8	3.8	3.2	2.6	2.6
77.5°	945.0	271.0	11.5	6.4	5.7	6.4	5.7	3.8	3.8	3.2	3.2
80°	281.8	65.0	8.3	5.1	4.5	5.1	5.7	3.8	2.6	1.9	1.9
82.5°	61.2	15.3	5.1	2.6	3.2	2.6	3.8	3.8	2.6	1.9	1.9
85°	20.4	5.7	3.2	2.6	1.9	1.9	1.9	1.9	1.9	1.9	1.3
87.5°	1.3	1.9	1.9	1.3	1.3	1.3	1.3	0.6	0.6	1.3	1.3
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)