

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: P401651

Luminaire Tested: **ENT-SA1E-735-U-SL4-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401651
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-SA1E-735-U-SL4-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 1050mA 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: 5422 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.2
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

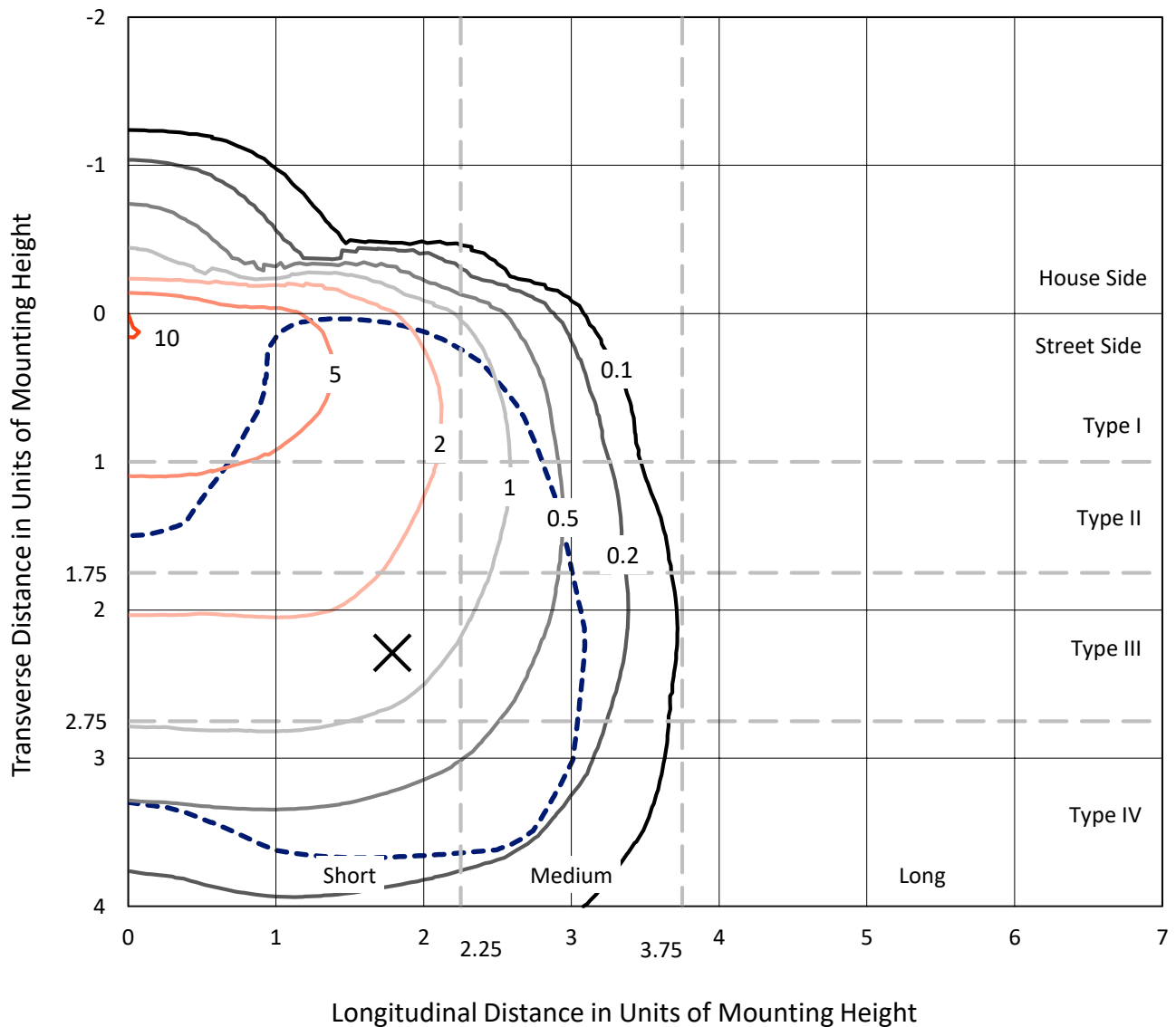


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

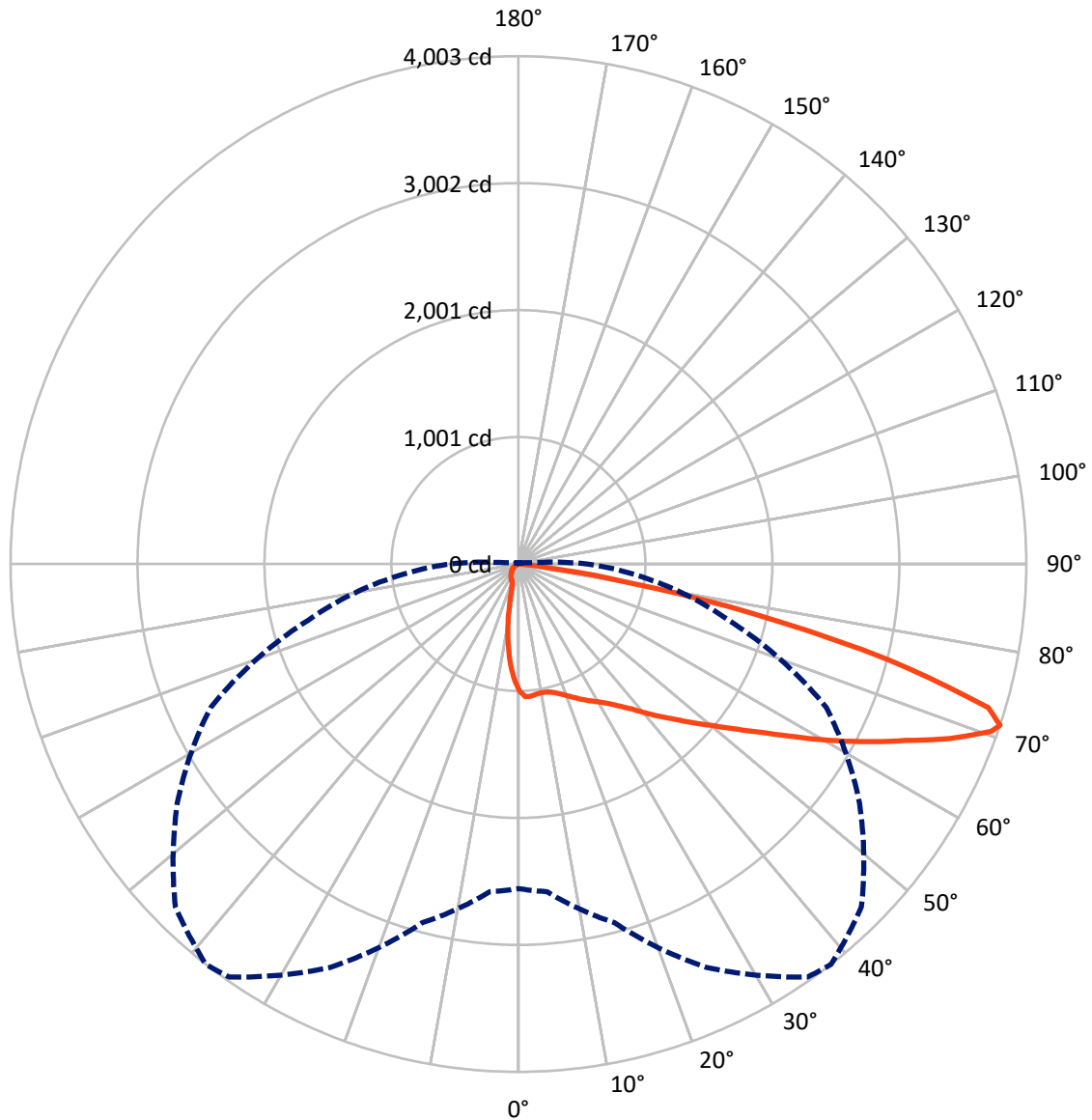


Based on 10 foot mounting height. Maximum calculated value = 10.3 fc
 Type IV - Short - Semi-Cutoff

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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	463.2	0.0	463.2
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	4958.8	0.0	4958.8
	% Fixture	91.5	0.0	91.5
Total	Lumens	5422.0	0.0	5422.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.4	1.6
10°-20°	204.4	3.8
20°-30°	327.8	6.0
30°-40°	498.6	9.2
40°-50°	777.1	14.3
50°-60°	1136.4	21.0
60°-70°	1457.6	26.9
70°-80°	890.9	16.4
80°-90°	44.7	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°	5422.0	100.0
0°-180°	5422.0	100.0



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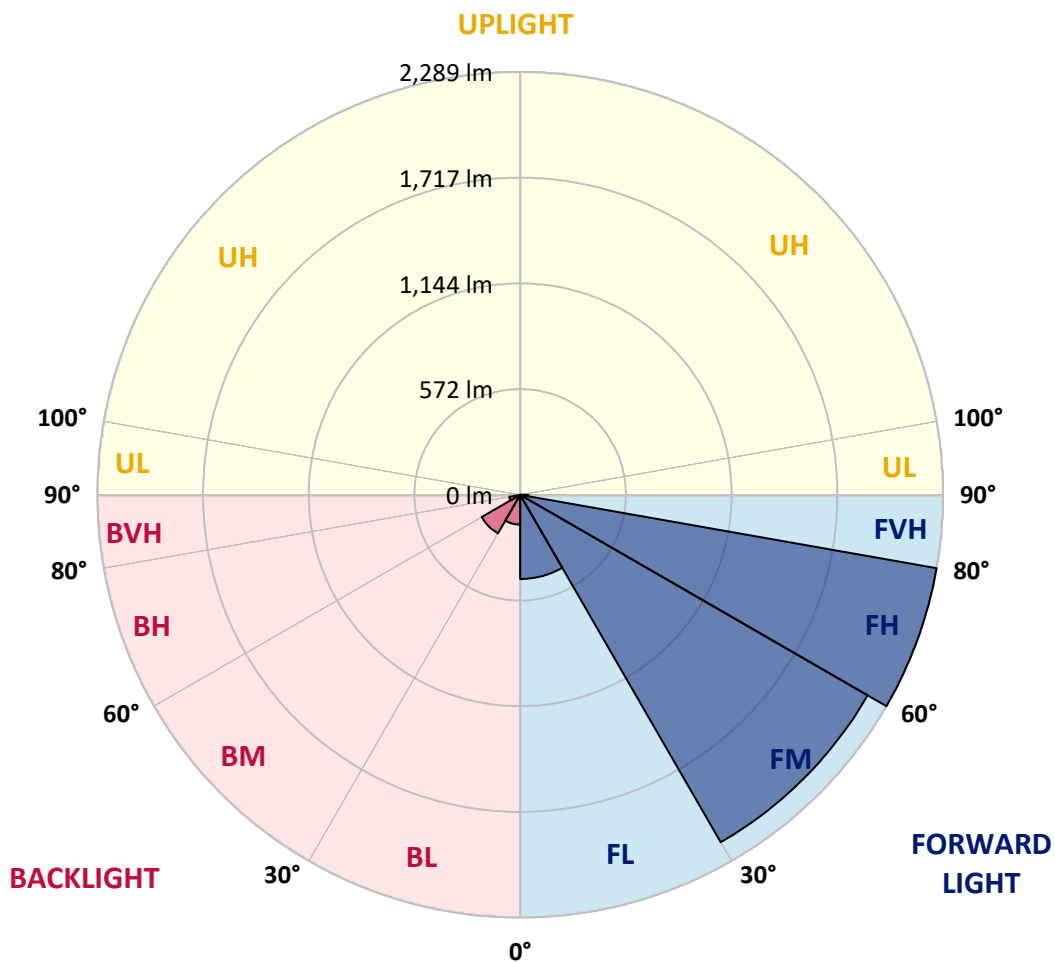
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	455.6	8.4			
FM	(30°-60°)	2171.6	40.1			
FH	(60°-80°)	2289.0	42.2			G2/5000
FVH	(80°-90°)	42.7	0.8			G1/100
BL	(0°-30°)	161.1	3.0	B1/500		
BM	(30°-60°)	240.6	4.4	B1/1000		
BH	(60°-80°)	59.5	1.1	B0/110		G0/110
BVH	(80°-90°)	2.0	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6
2.5°	1058.7	1055.9	1058.7	1055.9	1050.3	1047.5	1043.7	1033.4	1024.0	1012.7	995.8
5°	1060.6	1058.7	1058.7	1055.0	1048.4	1045.6	1041.8	1031.5	1019.3	1002.4	977.0
7.5°	1050.3	1049.3	1047.5	1043.7	1036.2	1034.3	1031.5	1019.3	1007.1	989.2	958.2
10°	1033.4	1035.3	1034.3	1034.3	1031.5	1029.6	1027.7	1013.6	1000.5	979.8	946.9
12.5°	1017.4	1019.3	1024.0	1031.5	1034.3	1035.3	1035.3	1021.2	1005.2	982.6	948.8
15°	1007.1	1010.8	1024.0	1039.0	1047.5	1050.3	1053.1	1038.1	1019.3	994.9	959.2
17.5°	1004.3	1009.9	1035.3	1058.7	1074.7	1076.6	1076.6	1057.8	1038.1	1009.9	971.4
20°	1013.6	1021.2	1054.0	1086.9	1106.7	1108.5	1104.8	1080.3	1056.9	1025.9	981.7
22.5°	1041.8	1048.4	1086.0	1124.5	1143.3	1145.2	1136.7	1102.9	1077.5	1052.2	995.8
25°	1090.7	1094.4	1134.8	1171.5	1181.8	1184.6	1170.5	1130.1	1101.0	1077.5	1015.5
27.5°	1155.5	1157.4	1194.0	1221.3	1223.1	1222.2	1207.2	1164.9	1135.8	1116.0	1045.6
30°	1223.1	1226.0	1256.0	1273.9	1266.4	1262.6	1249.4	1204.4	1178.0	1163.0	1088.8
32.5°	1286.1	1288.9	1321.8	1331.2	1314.3	1311.4	1302.1	1254.1	1231.6	1239.1	1150.8
35°	1348.1	1348.1	1385.7	1390.4	1375.3	1375.3	1375.3	1318.0	1314.3	1339.6	1237.2
37.5°	1403.5	1412.9	1452.4	1450.5	1447.7	1449.5	1455.2	1412.0	1425.1	1468.3	1350.9
40°	1450.5	1462.7	1515.3	1520.0	1532.2	1542.5	1551.0	1528.5	1559.5	1629.9	1496.5
42.5°	1492.8	1506.9	1574.5	1596.1	1629.9	1644.0	1660.0	1654.3	1722.9	1851.6	1682.5
45°	1547.2	1562.3	1631.8	1683.5	1730.4	1749.2	1784.9	1809.3	1923.0	2069.6	1883.6
47.5°	1619.6	1629.9	1693.8	1775.5	1839.4	1873.2	1928.7	1991.6	2129.7	2300.7	2063.0
50°	1718.2	1719.2	1767.1	1873.2	1968.1	2004.7	2100.6	2182.3	2355.2	2504.5	2192.6
52.5°	1827.2	1821.6	1859.1	1993.5	2113.7	2163.5	2276.2	2389.9	2563.7	2652.0	2250.9
55°	1930.5	1933.4	1956.8	2121.2	2296.9	2344.8	2487.6	2603.2	2754.4	2742.2	2282.8
57.5°	2049.8	2048.9	2079.0	2261.2	2511.1	2566.5	2715.9	2810.8	2870.0	2807.0	2288.5
60°	2162.6	2159.8	2205.8	2428.4	2739.4	2821.1	2955.5	2951.7	2985.5	2848.4	2283.8
62.5°	2263.1	2269.7	2350.5	2622.9	2994.9	3083.2	3150.9	3103.9	3113.3	2896.3	2225.5
65°	2385.2	2397.4	2528.0	2858.7	3310.6	3352.8	3379.1	3303.0	3209.1	2857.8	2048.9
67.5°	2539.3	2575.9	2760.1	3206.3	3639.4	3668.5	3669.4	3423.3	3205.3	2663.3	1722.9
70°	2600.3	2638.9	2932.0	3481.5	3916.5	3953.1	3838.5	3404.5	2952.6	2085.5	1163.0
71°	2558.1	2592.8	2927.3	3507.8	3973.8	4002.9	3823.5	3281.4	2677.4	1718.2	900.9
72.5°	2252.8	2342.9	2746.9	3342.5	3871.4	3872.3	3580.2	2991.2	2129.7	1072.8	452.8
75°	1216.6	1325.5	2013.2	2544.0	2986.5	3009.9	2754.4	2077.1	1030.6	278.1	109.9
77.5°	401.1	451.9	902.8	1320.8	1873.2	1909.9	1684.4	922.5	325.0	93.9	57.3
80°	251.8	257.4	305.3	555.2	833.3	864.3	693.3	373.9	146.6	51.7	39.5
82.5°	42.3	50.7	143.7	163.5	294.0	233.0	157.8	190.7	68.6	23.5	33.8
85°	0.0	0.0	0.9	0.9	4.7	0.9	0.9	38.5	3.8	3.8	17.8
87.5°	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9	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°	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6	999.6
2.5°	988.3	980.8	965.7	949.8	930.0	913.1	907.5	895.3	889.6	884.9	884.9
5°	961.0	947.9	915.9	883.1	851.1	817.3	786.3	757.2	743.1	723.4	732.8
7.5°	938.5	915.9	870.9	819.2	753.4	686.7	635.1	590.0	552.4	540.2	531.7
10°	922.5	894.3	828.6	749.7	653.8	559.0	479.1	404.9	361.7	335.4	335.4
12.5°	920.6	884.9	799.5	678.3	540.2	411.5	312.8	242.4	207.6	191.6	190.7
15°	927.2	884.0	773.2	613.4	435.9	285.6	195.4	164.4	155.9	154.1	154.1
17.5°	932.9	883.1	742.2	540.2	321.3	187.9	155.0	149.4	147.5	146.6	146.6
20°	938.5	878.4	706.5	457.5	227.3	153.1	144.7	141.9	140.9	140.0	140.0
22.5°	946.0	873.7	669.8	363.6	168.2	142.8	138.1	135.3	134.3	134.3	134.3
25°	956.3	870.9	624.7	275.3	144.7	135.3	130.6	128.7	128.7	127.8	127.8
27.5°	976.1	873.7	575.9	197.3	135.3	127.8	124.9	123.1	123.1	122.1	122.1
30°	1003.3	882.1	514.8	154.1	127.8	120.2	117.4	116.5	115.6	115.6	115.6
32.5°	1041.8	895.3	448.1	131.5	118.4	112.7	109.9	109.0	109.0	109.0	108.0
35°	1101.0	922.5	366.4	120.2	109.9	104.3	101.5	101.5	101.5	100.5	101.5
37.5°	1191.2	966.7	283.7	110.9	100.5	95.8	93.9	93.0	93.0	93.0	93.0
40°	1304.9	1038.1	206.7	102.4	92.1	87.4	85.5	84.5	83.6	83.6	83.6
42.5°	1451.4	1117.0	150.3	93.0	84.5	79.9	78.0	76.1	74.2	73.3	73.3
45°	1603.6	1210.9	117.4	85.5	77.0	73.3	71.4	68.6	65.8	62.9	62.9
47.5°	1751.1	1283.3	100.5	77.0	70.5	66.7	64.8	61.1	56.4	53.5	53.5
50°	1844.1	1305.8	90.2	69.5	63.9	61.1	58.2	53.5	47.0	44.2	44.2
52.5°	1873.2	1264.5	80.8	62.9	58.2	55.4	51.7	45.1	38.5	34.8	34.8
55°	1884.5	1184.6	71.4	58.2	52.6	48.9	44.2	37.6	31.0	27.2	27.2
57.5°	1870.4	1071.9	63.9	52.6	47.0	43.2	37.6	30.1	23.5	20.7	20.7
60°	1822.5	908.4	57.3	47.0	41.3	36.6	31.0	23.5	17.8	14.1	15.0
62.5°	1692.9	702.7	49.8	39.5	35.7	31.0	24.4	17.8	11.3	9.4	9.4
65°	1486.2	486.6	42.3	32.9	30.1	25.4	18.8	12.2	6.6	5.6	5.6
67.5°	1207.2	314.7	32.9	27.2	25.4	20.7	14.1	7.5	3.8	3.8	2.8
70°	758.1	155.9	26.3	20.7	20.7	16.0	10.3	4.7	2.8	2.8	2.8
71°	536.4	106.2	23.5	18.8	18.8	15.0	9.4	3.8	2.8	2.8	2.8
72.5°	242.4	66.7	19.7	16.9	16.0	12.2	8.5	3.8	3.8	3.8	3.8
75°	76.1	36.6	14.1	13.2	13.2	10.3	7.5	4.7	4.7	4.7	4.7
77.5°	50.7	28.2	9.4	8.5	10.3	10.3	7.5	5.6	5.6	5.6	5.6
80°	41.3	15.0	5.6	5.6	7.5	9.4	7.5	5.6	6.6	5.6	5.6
82.5°	40.4	7.5	1.9	2.8	4.7	5.6	5.6	4.7	5.6	5.6	5.6
85°	16.9	1.9	0.9	1.9	1.9	2.8	2.8	3.8	4.7	4.7	4.7
87.5°	0.0	0.0	0.0	0.0	0.9	0.9	1.9	1.9	2.8	3.8	3.8
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)