

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: McGRAW-EDISON

Report Number: P299578

Luminaire Tested: **GLNA-AF-01-LED-E1-SL2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-SL2-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4689.1 lumens
Efficiency: N/A
Efficacy: 79.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

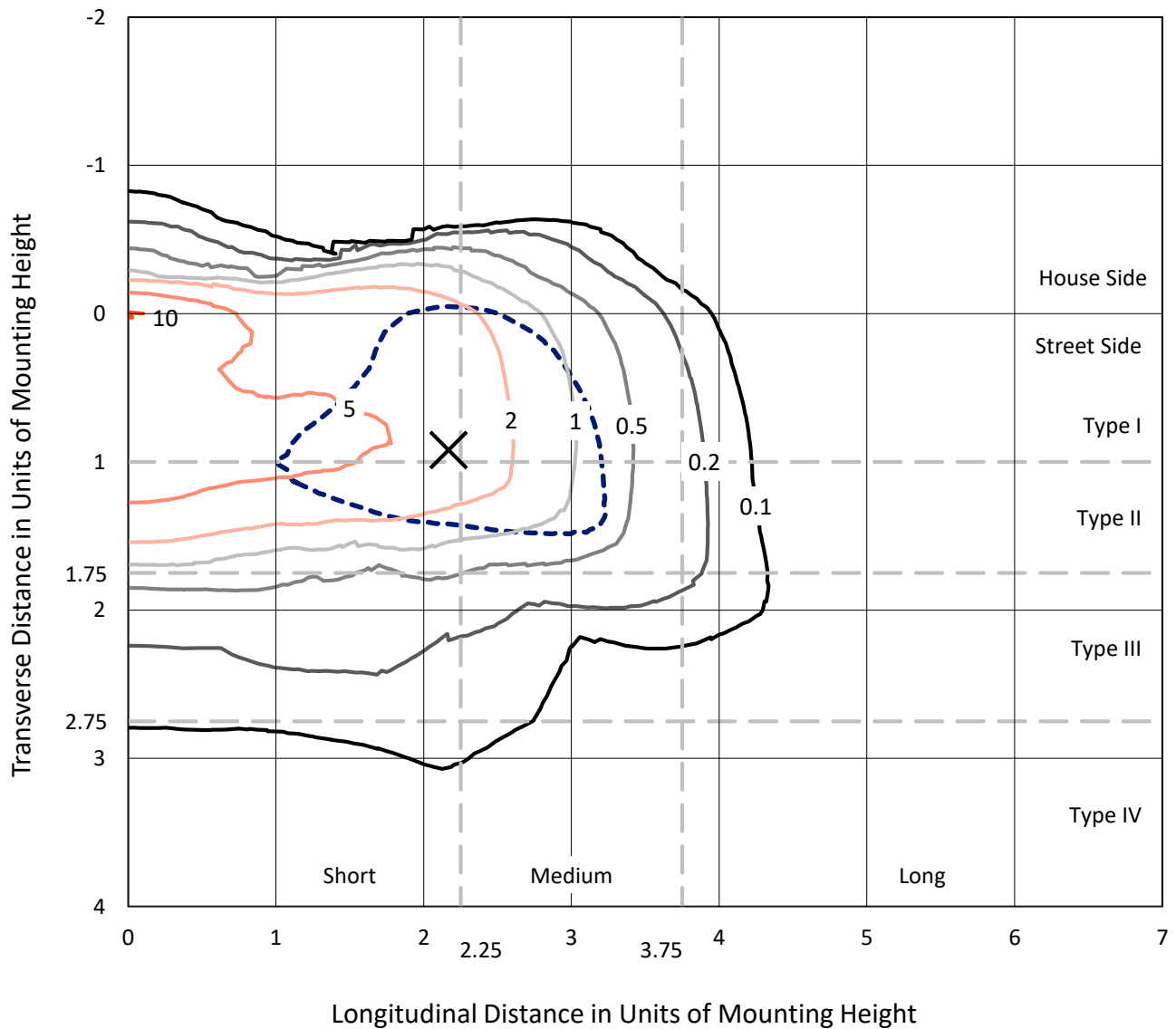
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

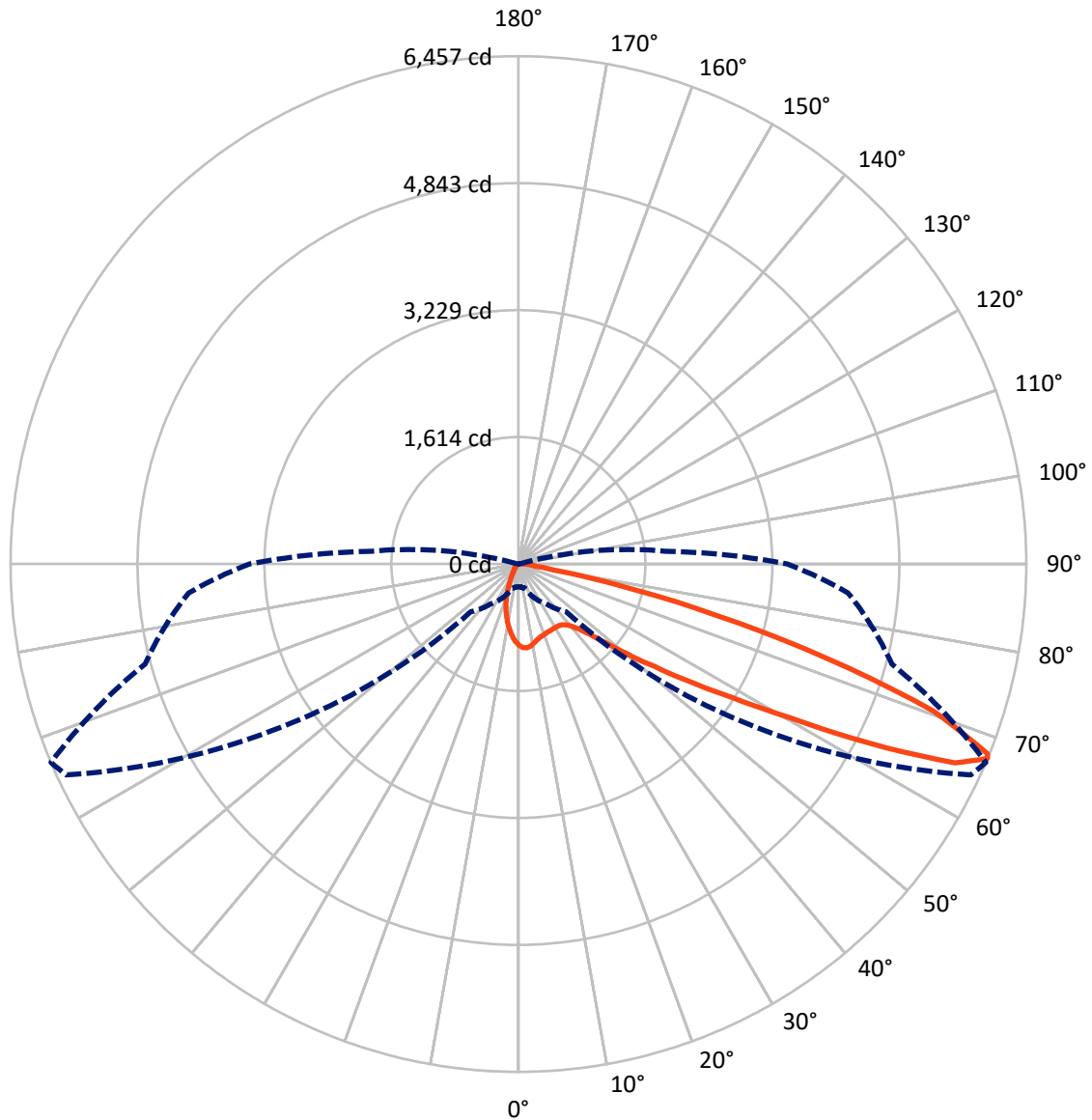
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	486.9	0.0	486.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	4202.3	0.0	4202.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	4689.1	0.0	4689.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	1.8
10°-20°	179.1	3.8
20°-30°	260.4	5.6
30°-40°	406.2	8.7
40°-50°	719.6	15.3
50°-60°	1138.7	24.3
60°-70°	1304.2	27.8
70°-80°	541.0	11.5
80°-90°	55.9	1.2
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°	4689.1	100.0
0°-180°	4689.1	100.0



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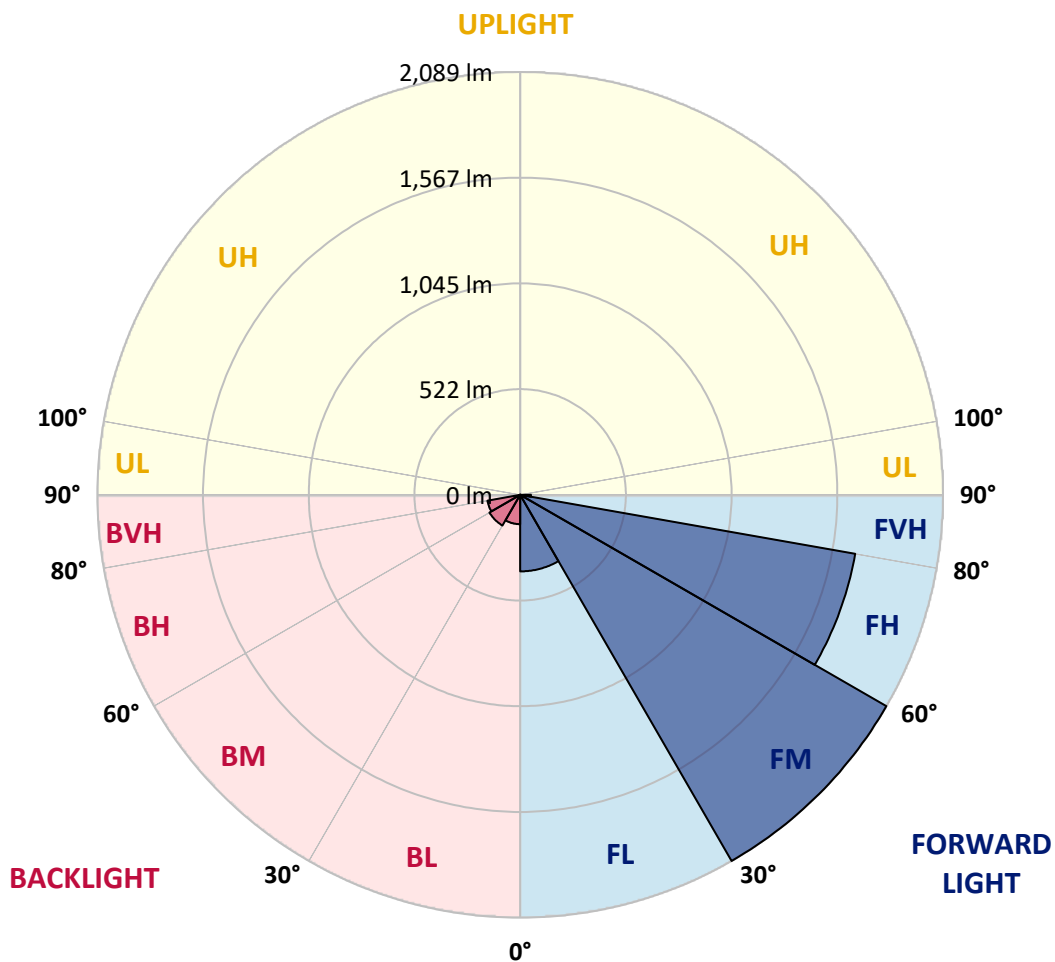
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	378.3	8.1			
FM	(30°-60°)	2089.5	44.6			
FH	(60°-80°)	1681.1	35.9			G1/1800
FVH	(80°-90°)	53.4	1.1			G1/100
BL	(0°-30°)	145.3	3.1	B1/500		
BM	(30°-60°)	175.0	3.7	B0/220		
BH	(60°-80°)	164.1	3.5	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1
2.5°	1069.1	1071.3	1071.0	1072.7	1076.5	1076.8	1073.0	1065.6	1063.9	1054.4	1037.7
5°	986.0	992.3	996.1	1011.7	1029.2	1050.3	1066.1	1071.9	1071.0	1064.2	1039.0
7.5°	891.1	897.4	901.7	920.1	943.3	979.4	1020.7	1054.6	1057.6	1065.0	1038.0
10°	827.9	829.0	835.0	852.5	876.9	913.8	963.0	1022.4	1031.4	1058.5	1035.2
12.5°	775.9	776.8	784.7	803.6	829.5	866.7	918.4	987.1	1001.0	1050.3	1034.7
15°	739.0	742.0	749.1	768.8	796.4	833.4	886.4	961.1	977.8	1047.3	1039.6
17.5°	726.7	730.0	732.2	746.4	771.6	807.7	862.1	944.1	963.0	1048.9	1049.2
20°	739.6	742.0	737.1	740.7	756.2	788.5	841.6	929.6	952.1	1050.8	1061.5
22.5°	787.4	788.5	775.1	759.5	756.8	774.6	825.4	918.2	942.2	1056.0	1076.0
25°	869.5	867.6	845.7	812.0	780.3	772.1	815.9	911.0	937.3	1061.5	1091.0
27.5°	968.5	971.2	941.1	892.2	831.7	788.5	814.5	908.0	935.1	1065.3	1104.1
30°	1088.8	1092.7	1058.2	996.7	910.0	829.0	827.1	907.5	933.7	1062.8	1105.2
32.5°	1211.6	1216.3	1189.2	1125.7	1014.4	896.8	855.5	913.5	936.5	1054.4	1098.9
35°	1340.2	1346.7	1328.7	1274.3	1156.1	994.7	905.6	931.8	949.3	1053.5	1092.7
37.5°	1517.7	1523.7	1489.8	1432.1	1327.6	1126.0	986.0	966.3	979.7	1066.7	1094.3
40°	1782.7	1781.9	1694.4	1606.0	1516.0	1292.9	1098.9	1028.7	1035.5	1106.3	1114.5
42.5°	2071.5	2070.2	1940.8	1806.5	1725.3	1498.3	1247.5	1136.4	1131.8	1179.4	1167.0
45°	2294.2	2293.9	2188.3	2037.1	1977.2	1734.0	1439.5	1286.3	1279.2	1298.1	1263.9
47.5°	2389.1	2390.7	2337.7	2231.3	2256.4	2052.9	1681.5	1503.5	1492.8	1485.1	1433.2
50°	2315.2	2318.5	2322.9	2302.1	2461.3	2481.5	2006.2	1809.5	1804.3	1770.1	1688.9
52.5°	2074.0	2090.7	2142.1	2208.0	2532.4	2892.9	2515.2	2189.7	2161.8	2125.4	2036.0
55°	1667.6	1685.9	1783.5	1943.5	2426.5	3163.1	3228.5	2679.8	2633.3	2524.7	2395.6
57.5°	1103.6	1132.0	1273.7	1477.2	2119.1	3206.6	3940.1	3360.0	3198.1	2900.8	2755.3
60°	608.0	635.4	789.1	973.4	1530.5	2991.6	4418.8	4245.6	3959.5	3321.2	3192.1
62.5°	374.4	389.2	502.7	674.2	917.9	2361.2	4517.8	5358.5	5027.3	3862.4	3719.7
65°	298.1	304.4	359.9	551.1	658.1	1404.5	4198.0	6206.9	6096.4	4517.8	4192.0
67°	289.4	291.8	318.1	473.2	620.3	861.0	3517.0	6345.1	6457.2	4914.4	4206.8
67.5°	291.3	294.0	318.9	451.6	619.2	791.3	3282.3	6290.6	6432.3	4945.8	4141.4
70°	280.9	289.4	365.1	451.3	588.9	657.5	1965.7	5450.4	5597.8	4595.4	3514.0
72.5°	99.6	100.1	157.8	365.1	640.3	664.6	987.1	3995.6	4104.8	3515.4	2533.5
75°	59.1	50.3	52.5	103.9	611.8	645.5	569.4	2553.2	2593.9	2014.4	1283.0
77.5°	40.8	35.6	36.6	45.9	233.0	636.4	452.4	1331.4	1287.9	706.5	273.2
80°	23.2	20.5	21.9	40.2	84.8	593.8	426.7	539.9	460.3	119.8	75.5
82.5°	12.3	10.4	12.6	33.1	59.1	370.1	427.5	260.9	206.8	40.5	51.4
85°	4.4	3.6	6.0	22.7	39.4	113.5	396.3	219.4	172.3	19.7	39.1
87.5°	0.8	0.8	2.5	9.3	15.9	34.7	234.4	130.2	87.2	11.8	26.8
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°	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1	1034.1
2.5°	1030.8	1019.1	1003.2	983.8	960.8	940.6	925.5	910.0	906.7	901.2	900.4
5°	1024.0	1003.8	964.4	919.3	871.1	827.6	792.3	760.9	746.9	734.9	733.5
7.5°	1013.9	983.5	916.5	843.8	768.6	700.2	642.2	601.2	563.4	545.4	542.6
10°	1002.1	958.6	862.6	761.7	657.8	561.2	475.1	402.9	359.1	333.1	329.8
12.5°	991.2	934.3	807.7	676.7	538.5	409.4	298.7	229.7	183.8	165.2	163.0
15°	986.0	914.6	756.2	589.7	413.8	260.7	163.3	126.4	111.3	106.9	106.7
17.5°	985.4	897.9	705.9	499.7	289.9	151.5	106.4	97.1	94.1	93.0	93.0
20°	985.2	882.1	655.6	406.4	184.1	100.9	88.6	86.4	84.2	82.9	82.9
22.5°	988.2	867.8	603.1	311.2	116.0	81.8	77.9	75.8	73.0	71.1	70.8
25°	991.2	856.9	549.5	221.5	84.0	71.1	67.3	64.3	60.4	58.0	57.7
27.5°	991.7	843.2	492.0	148.2	70.3	62.1	57.2	52.5	48.1	45.7	45.4
30°	983.5	820.2	428.3	100.1	62.1	53.9	47.3	42.4	38.3	36.4	36.4
32.5°	967.4	791.8	358.3	75.5	55.2	46.2	39.1	34.5	31.7	30.9	30.6
35°	952.9	761.2	286.4	64.0	49.5	39.1	32.0	29.0	27.4	27.1	26.8
37.5°	944.4	736.6	218.8	58.0	44.0	32.8	27.1	24.9	24.1	23.5	23.8
40°	951.0	716.0	161.6	53.1	38.6	27.4	23.0	21.9	21.1	20.8	20.8
42.5°	979.7	712.5	120.1	48.7	33.4	22.7	20.0	19.1	18.6	18.3	18.6
45°	1055.2	734.4	93.3	44.6	28.2	19.1	17.0	16.7	16.4	16.4	16.4
47.5°	1168.7	779.5	77.7	39.9	23.5	16.4	14.8	14.5	14.2	14.5	14.5
50°	1361.0	862.1	69.5	35.3	19.4	13.9	12.6	12.6	12.6	12.6	12.9
52.5°	1653.3	1024.6	64.0	30.6	15.9	11.8	10.7	10.7	10.9	10.9	11.2
55°	1979.1	1240.1	59.1	26.0	13.4	9.8	8.8	9.0	9.3	9.6	9.6
57.5°	2332.5	1478.8	55.0	21.3	11.5	7.9	7.4	7.7	7.9	8.5	8.5
60°	2758.9	1737.3	49.0	16.7	9.6	6.3	5.7	6.3	7.1	7.7	7.9
62.5°	3227.1	1987.3	41.3	13.1	7.9	4.9	4.6	5.7	6.8	7.4	7.7
65°	3547.1	2065.8	31.7	10.7	6.0	3.6	3.8	5.2	6.6	7.4	7.4
67°	3417.5	1873.0	26.0	9.0	4.9	2.7	3.6	5.2	6.6	7.1	7.4
67.5°	3327.5	1797.5	24.9	8.8	4.6	2.7	3.6	5.2	6.6	7.4	7.4
70°	2707.4	1350.3	20.8	6.6	3.8	2.5	3.0	4.9	6.3	7.1	7.1
72.5°	1881.2	832.6	18.6	4.6	3.3	2.2	2.7	4.6	6.0	6.8	7.1
75°	894.4	301.4	15.9	3.6	3.0	1.9	2.5	4.6	6.0	6.8	6.8
77.5°	182.4	70.0	12.9	3.0	2.5	1.9	2.2	4.4	5.7	6.6	6.6
80°	59.9	27.1	9.6	2.7	2.5	1.9	2.2	4.1	5.7	6.3	6.6
82.5°	43.2	13.7	6.3	2.7	2.5	1.9	1.9	4.1	5.5	6.3	6.3
85°	33.1	9.6	4.1	2.7	2.5	1.9	1.9	3.8	5.2	6.0	6.0
87.5°	21.9	3.8	3.3	2.7	2.5	1.9	1.9	3.8	4.9	5.7	6.0
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)