

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: P301867

Luminaire Tested: **GLNA-AF-02-LED-E1-SL4-7030-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301867
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-SL4-7030-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7017.8 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 85
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

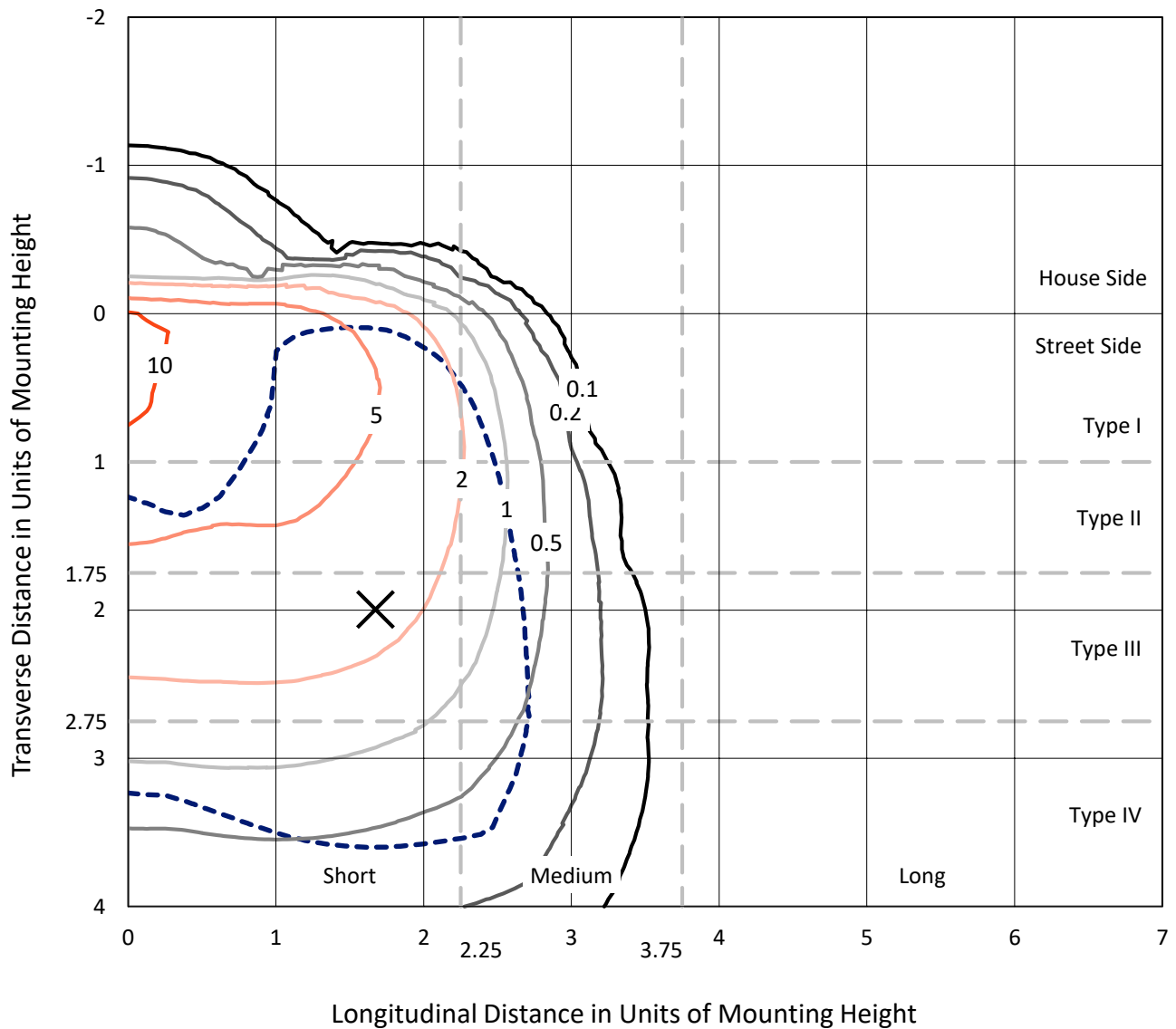


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

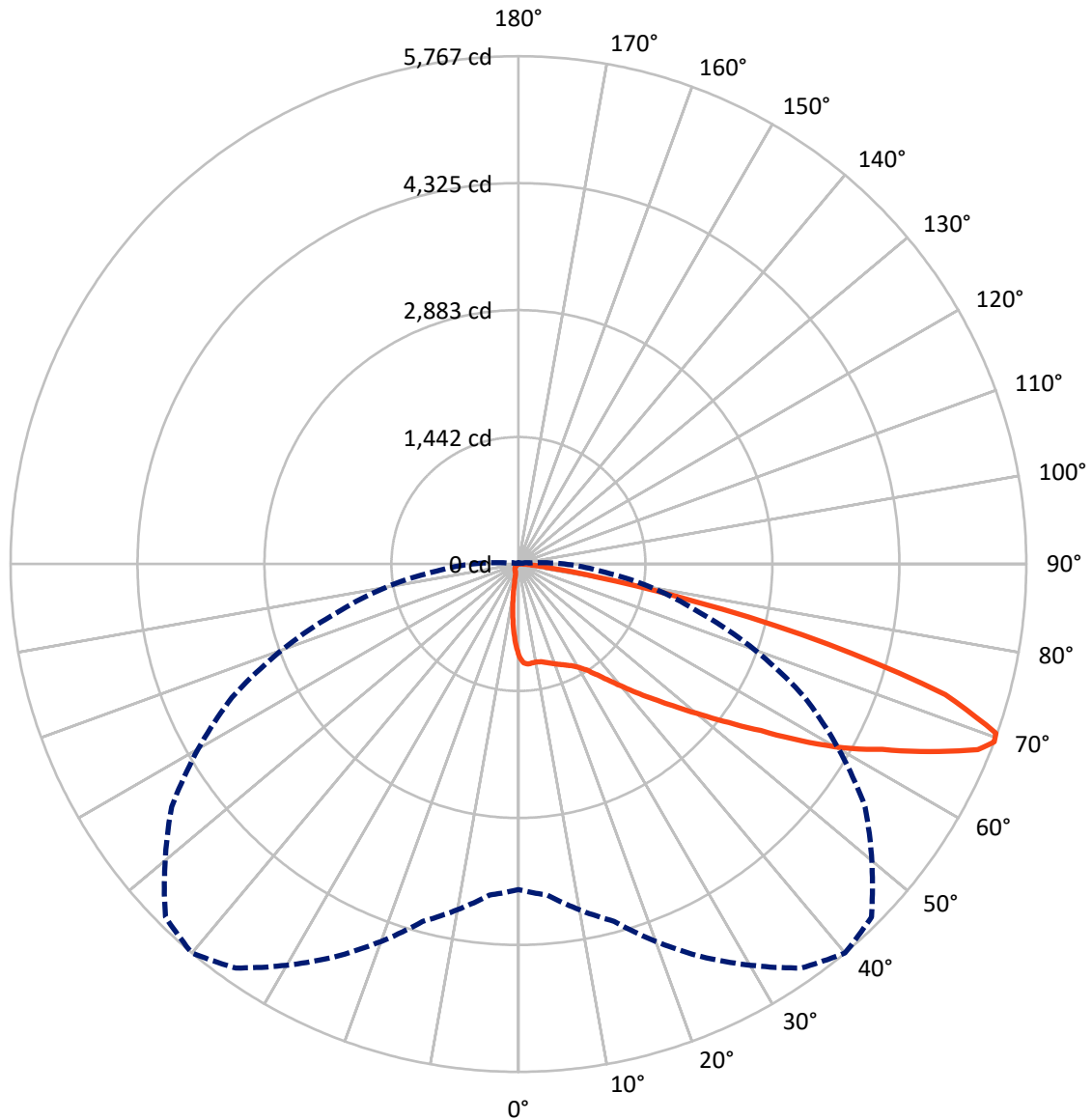


Based on 10 foot mounting height. Maximum calculated value = 11.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	410.6	0.0	410.6
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	6607.3	0.0	6607.3
	% Fixture	94.1	0.0	94.1
Total	Lumens	7017.8	0.0	7017.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	1.2
10°-20°	209.1	3.0
20°-30°	352.1	5.0
30°-40°	576.5	8.2
40°-50°	998.1	14.2
50°-60°	1572.1	22.4
60°-70°	2053.1	29.3
70°-80°	1057.4	15.1
80°-90°	114.4	1.6
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°	7017.8	100.0
0°-180°	7017.8	100.0



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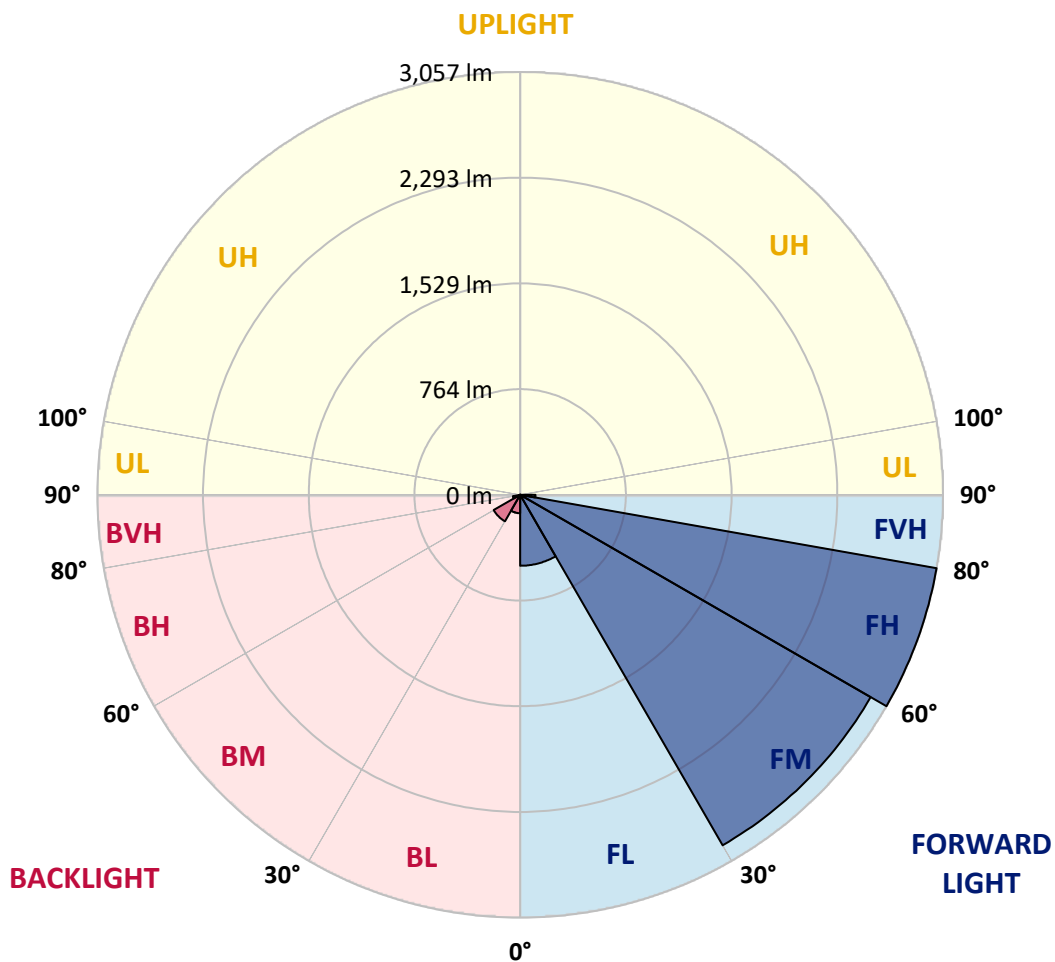
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	513.2	7.3			
FM	(30°-60°)	2926.0	41.7			
FH	(60°-80°)	3057.3	43.6			G2/5000
FVH	(80°-90°)	110.8	1.6			G2/225
BL	(0°-30°)	133.0	1.9	B1/500		
BM	(30°-60°)	220.7	3.1	B1/1000		
BH	(60°-80°)	53.3	0.8	B0/110		G0/110
BVH	(80°-90°)	3.6	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5
2.5°	1151.3	1145.0	1141.2	1136.2	1130.0	1124.5	1122.4	1107.0	1092.4	1072.3	1049.3
5°	1172.6	1170.5	1163.8	1157.1	1149.6	1141.2	1136.6	1118.3	1097.4	1068.1	1028.0
7.5°	1174.7	1172.2	1163.8	1154.6	1144.2	1134.1	1126.2	1107.8	1088.6	1058.9	1010.1
10°	1171.3	1168.4	1162.1	1152.1	1139.2	1129.5	1121.6	1104.1	1087.8	1061.0	1006.7
12.5°	1167.6	1164.6	1161.7	1156.7	1145.4	1138.7	1132.0	1115.3	1100.7	1078.2	1018.8
15°	1171.3	1169.6	1173.0	1170.9	1164.6	1158.8	1152.1	1137.1	1123.7	1104.9	1041.0
17.5°	1187.2	1187.2	1197.6	1198.9	1193.0	1184.7	1175.1	1160.0	1148.8	1132.9	1067.3
20°	1224.4	1223.1	1236.5	1239.0	1224.8	1211.8	1197.6	1179.3	1170.5	1160.5	1093.2
22.5°	1288.3	1282.4	1290.4	1287.9	1259.9	1239.8	1222.3	1199.7	1195.1	1190.5	1122.0
25°	1371.4	1368.1	1373.5	1348.9	1299.6	1272.4	1251.5	1226.0	1226.0	1230.6	1154.6
27.5°	1492.1	1479.6	1461.2	1417.8	1343.8	1309.2	1286.6	1259.5	1266.6	1283.7	1197.6
30°	1615.8	1602.0	1559.8	1493.0	1397.7	1361.4	1335.1	1306.7	1323.4	1354.7	1255.3
32.5°	1737.8	1722.3	1662.6	1578.2	1475.0	1438.7	1413.2	1381.9	1409.8	1462.5	1339.7
35°	1856.0	1842.2	1773.3	1673.8	1577.8	1547.7	1524.3	1497.1	1533.1	1606.6	1458.7
37.5°	1988.8	1973.8	1889.8	1782.0	1702.7	1680.9	1663.8	1636.7	1699.3	1807.1	1624.6
40°	2152.1	2126.7	2013.5	1906.1	1847.2	1836.8	1825.1	1821.3	1918.6	2067.8	1845.5
42.5°	2339.3	2297.5	2143.0	2036.9	2005.9	2013.5	2010.5	2027.2	2193.1	2391.9	2114.6
45°	2526.4	2472.5	2287.1	2176.4	2180.6	2206.9	2223.2	2290.0	2536.9	2763.7	2404.0
47.5°	2685.2	2632.1	2425.3	2327.2	2377.3	2429.1	2473.4	2600.0	2890.3	3129.6	2629.2
50°	2820.9	2770.8	2572.0	2493.0	2605.8	2689.3	2761.2	2948.8	3270.4	3408.3	2787.1
52.5°	2932.0	2898.6	2724.0	2683.1	2866.9	2989.3	3094.5	3319.3	3607.1	3634.7	2909.9
55°	3040.2	3016.4	2887.4	2909.1	3173.5	3340.2	3473.4	3712.4	3897.0	3823.5	3027.7
57.5°	3164.7	3143.0	3073.7	3195.6	3576.6	3786.3	3931.7	4060.8	4152.2	4016.5	3138.8
60°	3291.7	3279.2	3280.9	3513.9	4039.5	4240.8	4321.0	4354.4	4402.9	4198.2	3145.1
62.5°	3412.9	3436.7	3517.7	3868.2	4482.7	4637.2	4677.7	4710.7	4653.9	4227.0	2905.7
65°	3618.0	3656.8	3850.2	4342.3	4970.2	5135.6	5177.3	5064.1	4693.6	3854.4	2363.5
67.5°	3718.2	3789.2	4134.3	4784.3	5443.0	5626.8	5611.4	5087.1	4212.0	2939.2	1516.8
69°	3697.3	3772.9	4199.9	4919.6	5600.1	5766.8	5668.6	4806.0	3588.3	2129.2	931.1
70°	3614.6	3691.1	4166.0	4914.6	5620.1	5752.1	5562.5	4458.9	3034.0	1556.9	582.3
72.5°	3018.5	3084.5	3698.6	4442.1	5177.3	5070.0	4653.5	3089.1	1478.3	424.0	131.2
75°	1858.1	1894.8	2653.8	3346.4	3910.4	3634.7	3100.4	1536.8	440.7	119.9	72.7
77.5°	981.7	998.4	1452.9	1972.5	2478.8	2051.1	1589.0	599.4	203.0	75.2	52.6
80°	580.2	592.8	782.4	901.9	1072.7	896.0	635.4	368.0	145.4	47.2	46.8
82.5°	332.1	340.0	567.3	501.3	422.7	360.9	316.2	348.8	87.3	31.7	48.5
85°	122.0	123.6	319.1	381.4	251.5	149.5	157.1	289.1	23.4	20.1	38.0
87.5°	56.8	55.6	164.2	233.5	147.0	94.8	122.4	63.5	9.2	12.9	10.4
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°	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5	1048.5
2.5°	1036.0	1020.5	992.5	963.7	934.5	911.9	889.8	872.2	866.4	855.5	856.3
5°	1004.2	975.8	917.3	858.0	796.2	745.2	697.2	658.3	639.5	620.3	620.3
7.5°	976.7	935.3	843.8	747.3	647.5	563.5	487.9	431.1	399.8	374.7	374.3
10°	966.2	910.2	782.4	644.1	505.0	390.6	300.8	243.1	213.5	194.2	193.4
12.5°	970.8	901.5	735.2	548.9	374.3	251.1	174.2	137.0	124.5	118.6	118.6
15°	984.2	899.0	688.0	455.7	264.4	157.1	115.7	105.7	104.9	104.9	104.9
17.5°	1000.5	899.8	639.5	365.1	180.0	112.4	99.8	98.6	99.4	99.4	99.4
20°	1017.2	900.2	587.3	281.1	127.0	97.7	94.0	93.6	94.4	94.4	94.8
22.5°	1037.6	902.3	535.1	210.1	104.9	92.3	89.4	89.4	89.8	89.8	89.4
25°	1061.0	906.5	480.8	155.8	95.7	88.6	86.1	85.6	86.1	85.6	85.2
27.5°	1090.3	912.3	420.2	122.0	91.5	84.8	82.7	82.7	82.3	81.9	81.5
30°	1127.0	919.0	352.1	103.6	87.3	81.5	79.4	79.0	78.5	77.7	77.7
32.5°	1183.0	933.6	284.9	94.0	82.7	76.9	75.2	75.2	74.4	73.5	73.1
35°	1269.1	962.5	224.7	88.1	77.7	71.8	69.8	69.8	68.9	68.5	68.1
37.5°	1388.1	1006.3	174.6	82.7	72.7	66.4	64.3	63.9	63.1	62.2	61.8
40°	1546.4	1060.6	137.4	77.7	67.7	61.0	59.3	58.5	56.8	55.6	55.6
42.5°	1745.3	1122.4	111.5	72.3	61.8	56.0	54.7	53.5	50.5	49.3	48.9
45°	1953.3	1178.0	94.4	66.0	56.0	51.0	50.1	48.0	44.3	43.0	43.0
47.5°	2103.3	1190.9	83.1	60.2	50.5	45.5	45.1	41.4	38.0	37.2	36.8
50°	2196.8	1165.5	73.9	54.3	45.5	40.5	39.3	34.7	32.6	31.7	31.3
52.5°	2259.9	1119.9	66.4	49.3	40.9	35.9	33.0	29.7	28.0	27.2	27.2
55°	2310.5	1055.6	58.9	44.7	37.2	32.2	28.0	25.5	23.8	23.0	23.0
57.5°	2324.7	968.3	51.4	40.9	33.4	28.4	23.8	22.1	20.1	19.6	19.6
60°	2221.5	810.8	45.5	36.3	30.1	24.6	20.9	18.8	16.7	16.3	15.9
62.5°	1949.5	627.4	40.1	32.2	26.3	21.3	18.0	15.5	13.8	13.8	13.8
65°	1487.1	420.7	35.1	28.0	23.0	18.0	15.5	12.5	11.7	11.7	12.1
67.5°	890.2	228.9	30.1	23.8	19.6	15.0	12.9	10.9	10.4	10.9	10.9
69°	521.7	134.5	27.2	21.3	17.1	13.4	11.3	9.6	10.4	10.9	10.9
70°	322.1	90.6	25.1	19.2	15.5	12.1	10.4	9.2	10.0	10.4	10.4
72.5°	89.8	46.8	20.1	15.0	12.5	10.0	8.4	8.4	9.6	10.0	10.0
75°	58.5	34.7	15.5	11.3	9.6	7.9	7.1	7.9	9.2	9.6	9.6
77.5°	48.5	28.4	12.5	9.2	7.9	7.5	6.7	7.1	8.4	8.8	8.8
80°	44.3	20.1	10.0	8.4	7.1	6.7	6.3	5.8	7.5	7.9	7.9
82.5°	42.2	15.9	8.8	7.5	6.7	5.8	5.4	5.8	6.7	7.1	7.5
85°	26.3	10.4	7.9	7.1	5.8	5.4	5.4	5.4	6.3	6.7	6.7
87.5°	9.6	8.4	7.1	5.8	5.0	5.0	5.0	5.0	5.4	6.3	6.3
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)