

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: P299995

Luminaire Tested: **GLNA-AF-02-LED-E1-SL3-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
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-SL3-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5409.3 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 66
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

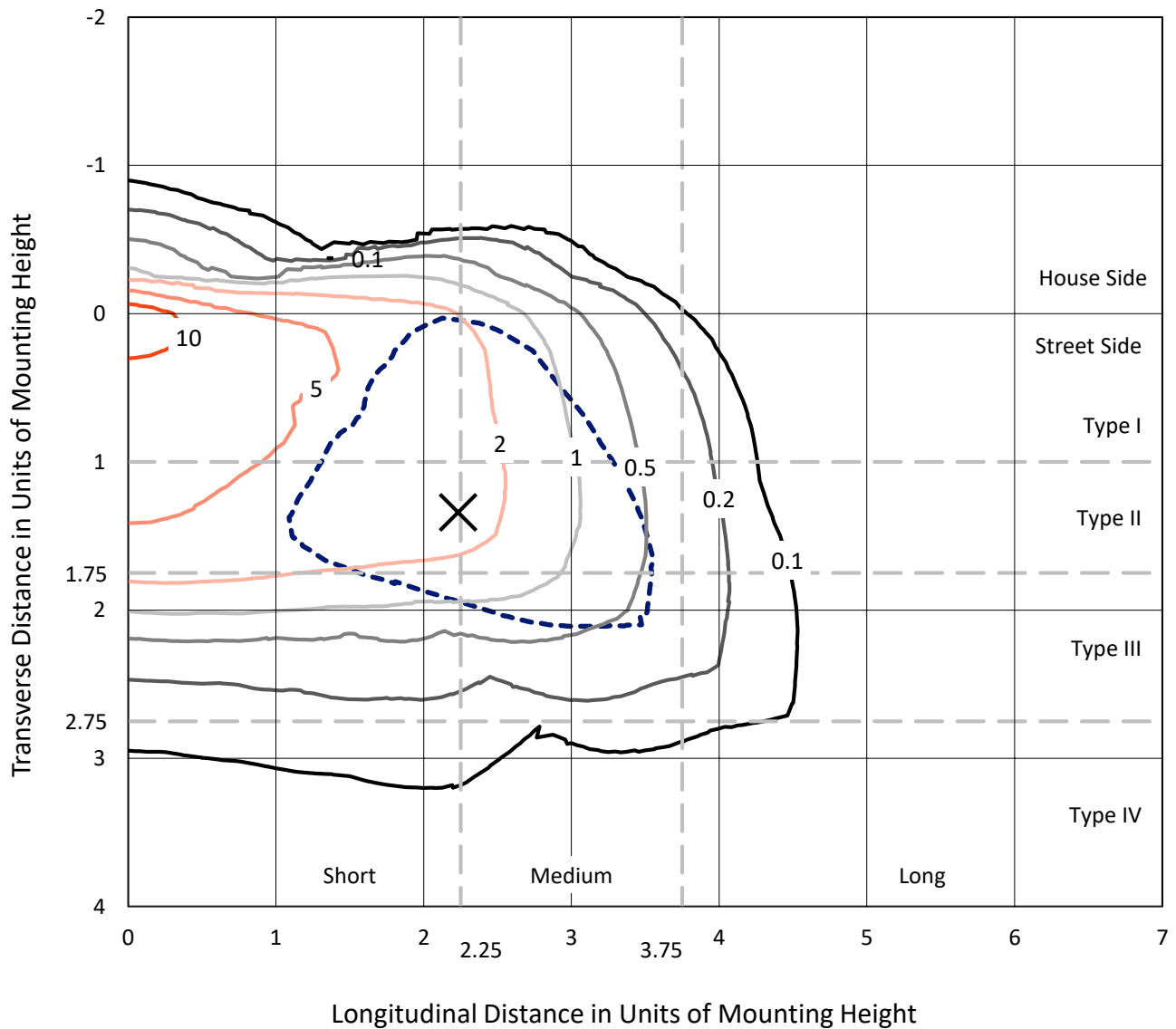


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

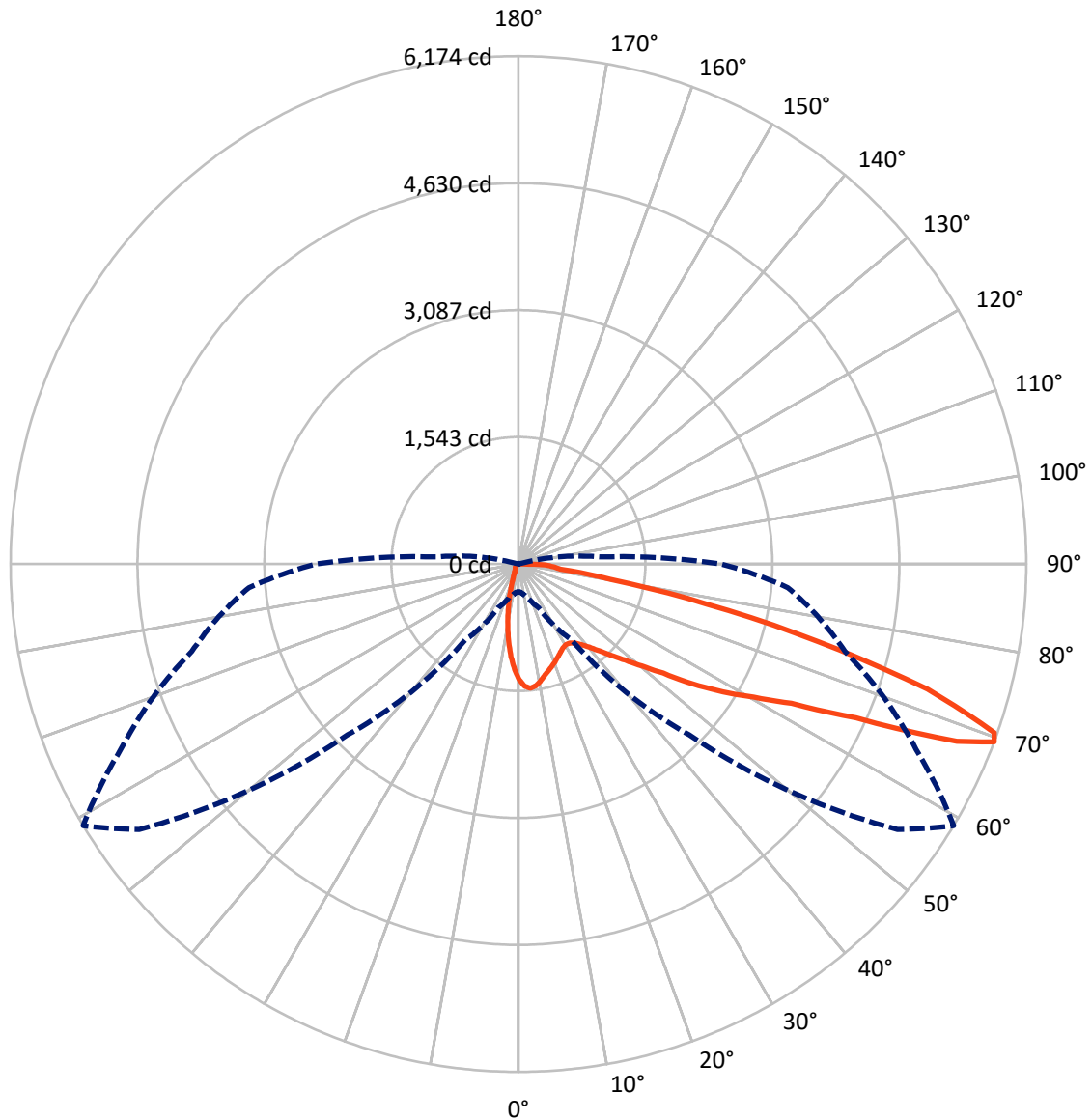


Based on 10 foot mounting height. Maximum calculated value = 14.1 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	440.5	0.0	440.5
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	4968.8	0.0	4968.8
	% Fixture	91.9	0.0	91.9
Total	Lumens	5409.3	0.0	5409.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	2.1
10°-20°	236.1	4.4
20°-30°	317.8	5.9
30°-40°	461.4	8.5
40°-50°	768.2	14.2
50°-60°	1198.4	22.2
60°-70°	1482.9	27.4
70°-80°	751.5	13.9
80°-90°	78.6	1.5
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°	5409.3	100.0
0°-180°	5409.3	100.0



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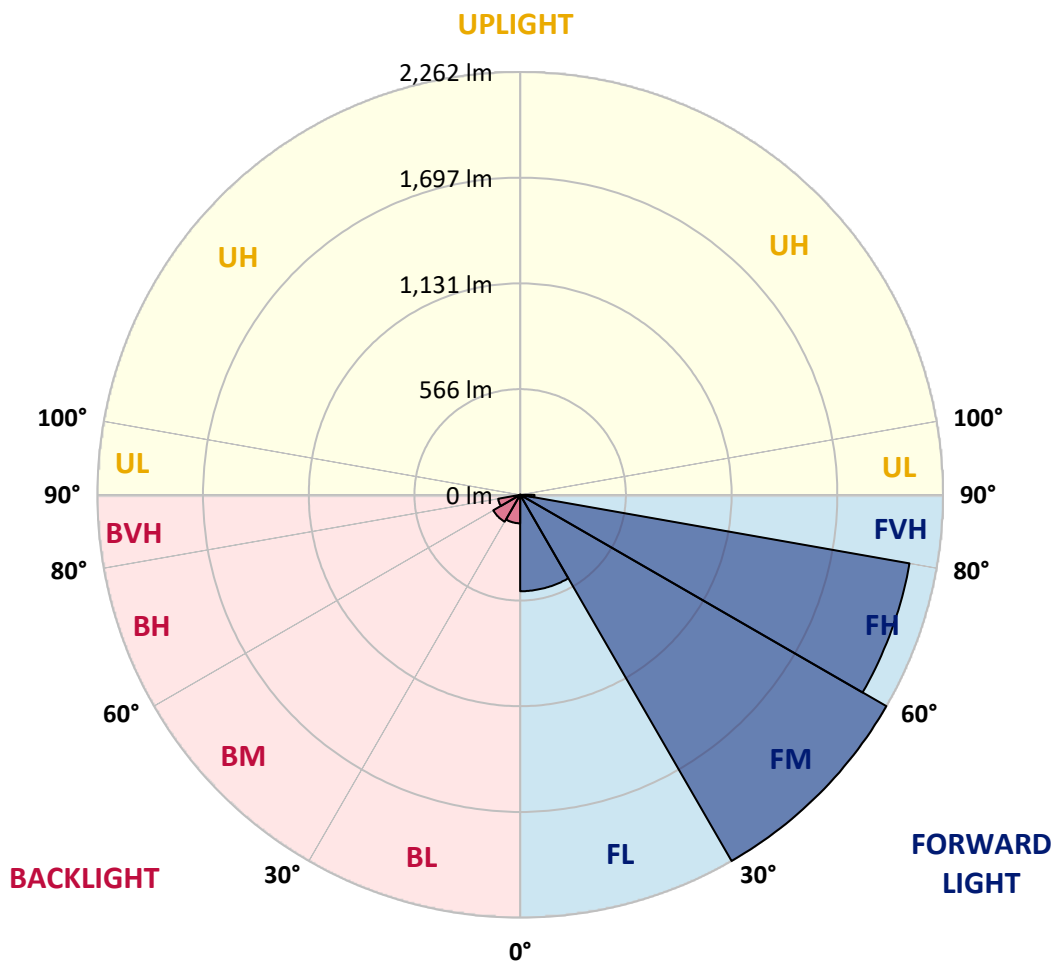
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	515.7	9.5			
FM	(30°-60°)	2262.0	41.8			
FH	(60°-80°)	2114.8	39.1			G2/5000
FVH	(80°-90°)	76.2	1.4			G1/100
BL	(0°-30°)	152.5	2.8	B1/500		
BM	(30°-60°)	166.0	3.1	B0/220		
BH	(60°-80°)	119.6	2.2	B1/500		G1/500
BVH	(80°-90°)	2.4	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9
2.5°	1543.1	1542.6	1535.8	1532.8	1527.2	1515.6	1497.6	1488.1	1472.9	1446.2	1410.4
5°	1529.1	1536.5	1540.4	1540.7	1544.7	1540.4	1524.2	1516.3	1495.2	1452.3	1388.1
7.5°	1433.7	1436.4	1447.8	1457.5	1476.5	1494.5	1500.4	1496.9	1484.4	1438.6	1353.2
10°	1331.5	1334.2	1347.7	1360.5	1386.3	1414.0	1443.4	1449.6	1454.8	1419.0	1319.6
12.5°	1243.4	1246.1	1259.9	1276.7	1306.7	1341.0	1386.5	1396.6	1419.6	1400.3	1292.6
15°	1167.5	1168.7	1182.2	1203.0	1238.8	1282.8	1334.6	1350.8	1386.0	1387.2	1269.1
17.5°	1103.0	1106.0	1114.4	1134.2	1173.4	1227.8	1288.1	1311.3	1352.6	1376.2	1246.1
20°	1063.5	1066.6	1066.3	1077.3	1112.5	1170.6	1241.6	1269.4	1319.6	1364.9	1225.7
22.5°	1055.9	1055.9	1048.0	1046.4	1067.2	1115.8	1193.3	1227.2	1289.9	1360.0	1211.3
25°	1083.2	1081.9	1062.0	1045.8	1046.8	1075.7	1146.4	1186.8	1264.9	1363.3	1203.6
27.5°	1140.7	1139.1	1114.0	1083.2	1058.3	1058.1	1110.9	1154.4	1244.9	1379.2	1206.7
30°	1220.1	1219.6	1192.3	1153.4	1108.5	1067.2	1098.7	1138.2	1232.1	1407.9	1213.7
32.5°	1307.0	1306.1	1285.6	1244.7	1187.7	1108.5	1111.6	1144.6	1235.8	1446.2	1230.9
35°	1399.1	1397.6	1388.7	1352.9	1290.2	1184.7	1153.8	1179.5	1259.0	1503.4	1264.5
37.5°	1498.8	1500.4	1506.8	1472.5	1406.7	1291.4	1224.5	1241.9	1305.8	1581.1	1319.2
40°	1645.9	1645.7	1647.8	1602.8	1539.5	1422.0	1323.2	1328.8	1384.1	1684.2	1402.5
42.5°	1912.9	1894.3	1837.7	1746.0	1682.3	1571.3	1447.8	1441.9	1479.9	1811.7	1519.0
45°	2271.8	2232.0	2085.2	1909.3	1827.9	1739.6	1600.9	1582.3	1606.5	1965.0	1662.8
47.5°	2580.4	2539.1	2331.4	2079.4	1982.4	1899.2	1780.5	1746.9	1754.9	2136.6	1845.1
50°	2685.3	2665.1	2483.8	2227.4	2132.0	2100.2	1988.9	1947.8	1936.6	2335.0	2056.4
52.5°	2648.9	2647.4	2526.6	2323.5	2269.0	2308.2	2251.0	2203.5	2162.0	2544.3	2271.4
55°	2590.5	2598.2	2544.0	2407.6	2405.7	2498.1	2609.4	2570.0	2449.5	2771.6	2456.8
57.5°	2429.3	2462.0	2534.3	2566.7	2641.9	2736.4	2908.0	2931.3	2788.7	2945.6	2610.7
60°	1971.1	2043.0	2279.1	2589.5	2946.3	3181.8	3268.4	3288.2	3067.0	3090.3	2818.4
62.5°	1399.1	1472.5	1772.0	2297.2	2950.8	3766.9	3805.1	3727.1	3373.6	3304.8	3176.6
65°	742.6	799.3	1044.0	1658.2	2558.4	3902.7	4743.9	4511.5	3914.3	3726.5	3639.4
67.5°	379.9	397.0	494.3	811.5	1758.8	3466.5	5585.4	5749.0	4846.3	4145.0	3617.0
69°	336.2	346.3	410.8	586.7	1126.2	2936.2	5626.4	6173.9	5334.3	4110.1	3287.0
70°	325.4	334.3	393.0	531.0	880.3	2462.3	5469.4	6136.6	5459.0	3977.4	3040.5
72.5°	276.3	283.8	350.0	469.3	715.5	1222.3	4442.9	5200.0	4898.7	3313.3	2200.8
75°	184.8	209.9	335.9	439.9	665.6	694.4	2929.1	3757.7	3490.7	2234.8	1146.4
77.5°	44.4	47.7	94.8	350.0	608.7	611.1	1506.5	2336.0	1905.3	796.5	271.0
80°	23.9	23.0	26.6	69.5	566.8	573.5	678.2	1133.9	680.3	132.2	89.3
82.5°	16.9	15.9	17.1	29.1	178.4	522.4	490.6	513.2	282.0	50.7	40.1
85°	6.1	5.8	9.4	26.3	55.9	300.3	504.1	423.3	228.5	23.2	29.4
87.5°	2.1	1.9	3.7	14.4	17.1	127.9	311.1	320.0	89.9	14.1	13.8
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°	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9	1407.9
2.5°	1395.4	1376.5	1341.6	1305.8	1272.7	1233.0	1213.1	1193.5	1185.3	1182.2	1167.9
5°	1355.1	1322.9	1248.9	1174.6	1106.0	1033.2	985.3	946.7	924.1	913.0	895.6
7.5°	1303.4	1250.8	1138.4	1023.8	917.0	811.8	733.8	673.8	632.5	612.7	594.6
10°	1253.2	1183.2	1023.5	867.2	722.2	582.7	475.0	397.0	347.2	324.2	309.6
12.5°	1208.3	1117.4	912.5	714.6	532.5	369.2	259.7	197.6	166.7	156.0	150.8
15°	1168.2	1056.9	807.6	569.5	360.6	211.1	142.0	120.9	115.9	115.9	115.3
17.5°	1130.2	997.5	706.2	433.4	226.3	129.1	108.0	105.2	105.2	106.4	106.4
20°	1093.8	940.9	608.3	311.1	142.5	102.4	97.6	97.0	97.6	99.1	99.1
22.5°	1062.6	889.5	516.9	213.5	105.9	92.3	89.9	89.0	89.3	90.2	90.8
25°	1039.4	846.1	430.7	144.7	91.1	84.1	81.4	79.8	78.6	78.6	79.2
27.5°	1024.7	809.4	347.2	105.2	82.0	76.5	72.1	69.7	67.0	65.5	66.0
30°	1014.0	774.5	268.8	85.9	73.4	67.9	62.4	58.4	54.5	52.6	53.3
32.5°	1010.0	746.3	201.0	75.8	65.8	59.6	52.9	47.7	43.4	41.9	42.2
35°	1020.7	724.0	147.2	68.5	59.6	52.0	44.4	38.5	35.2	34.3	34.5
37.5°	1048.9	712.1	110.1	62.4	54.2	45.6	37.0	31.5	29.4	29.4	29.6
40°	1102.0	711.8	88.4	58.2	49.3	39.5	30.6	26.6	25.4	26.0	26.3
42.5°	1179.7	728.0	77.1	54.2	45.0	33.6	25.4	22.6	22.3	23.0	23.2
45°	1285.9	757.6	70.9	50.7	40.4	28.2	21.4	19.5	19.5	20.5	20.8
47.5°	1415.9	801.1	65.8	47.4	35.7	23.5	18.3	17.1	17.4	18.3	18.6
50°	1572.5	855.9	60.6	43.7	32.4	19.5	15.9	15.0	15.3	16.5	16.9
52.5°	1750.9	929.6	56.3	40.4	28.2	16.2	13.4	12.9	13.4	14.7	15.0
55°	1903.8	995.6	51.1	37.6	22.6	13.4	11.0	11.0	11.7	13.2	13.4
57.5°	2050.9	1064.7	46.5	32.4	17.8	10.7	9.2	9.4	10.4	11.9	12.2
60°	2266.9	1181.9	41.0	27.2	13.4	8.5	7.7	8.0	9.2	10.7	11.0
62.5°	2633.6	1360.2	35.5	22.6	10.4	6.8	6.1	6.8	8.2	10.1	10.4
65°	2964.6	1432.8	29.1	19.0	8.0	5.2	5.2	6.1	8.0	9.8	10.1
67.5°	2780.1	1206.0	22.6	15.0	6.1	4.0	4.3	5.8	7.7	9.8	10.1
69°	2458.7	986.2	19.3	11.9	5.2	3.7	4.0	5.8	7.7	9.4	9.8
70°	2208.2	832.6	17.1	10.1	4.6	3.7	4.0	5.5	7.7	9.4	9.8
72.5°	1479.0	449.6	13.8	7.3	4.3	3.3	3.3	5.5	7.3	9.2	9.4
75°	635.6	124.2	11.0	5.2	3.7	3.1	3.1	5.2	7.0	8.9	9.4
77.5°	116.2	31.5	8.9	4.6	3.7	3.1	2.8	4.9	6.8	8.5	8.9
80°	46.2	15.6	7.0	4.0	3.3	2.8	2.4	4.6	6.4	8.2	8.5
82.5°	27.9	8.9	5.8	3.7	3.3	2.4	2.1	4.0	6.1	8.0	8.2
85°	22.6	6.1	4.6	3.7	3.1	2.4	1.9	3.7	5.5	7.7	8.0
87.5°	11.0	4.3	4.3	3.3	3.1	2.4	1.9	3.3	5.2	7.3	7.7
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)