

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: P300906

Luminaire Tested: **GLNA-AF-02-LED-E1-SL4-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300906  
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-SL4-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8094.3 lumens  
Efficiency: N/A  
Efficacy: 95.2 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

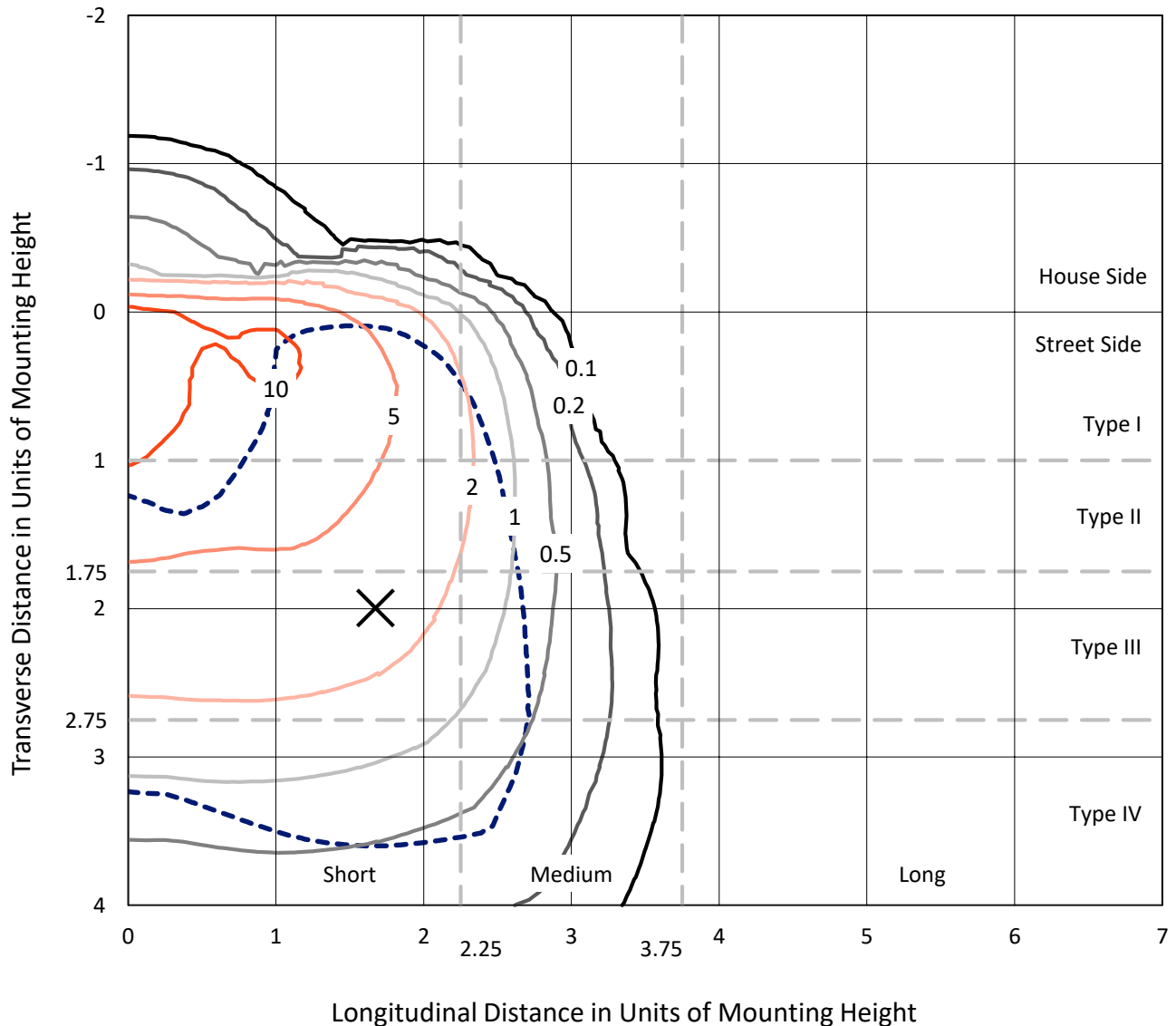


REPORT NUMBER: P300906

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

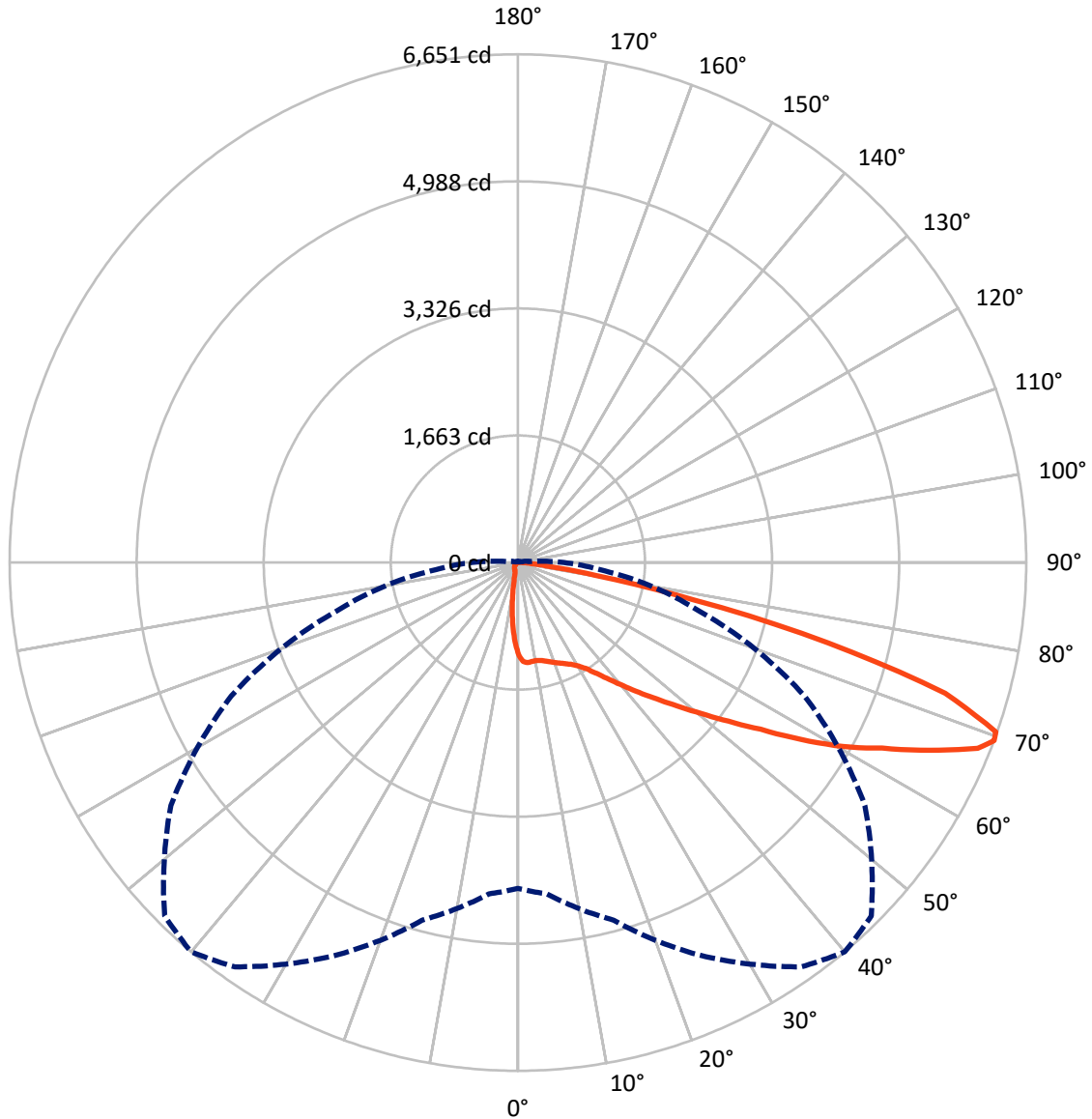
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.2 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P300906  
CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4-7027-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P300906

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	473.6	0.0	473.6
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	7620.7	0.0	7620.7
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	8094.3	0.0	8094.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.1	1.2
10°-20°	241.1	3.0
20°-30°	406.1	5.0
30°-40°	664.9	8.2
40°-50°	1151.2	14.2
50°-60°	1813.3	22.4
60°-70°	2368.0	29.3
70°-80°	1219.6	15.1
80°-90°	131.9	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°	8094.3	100.0
0°-180°	8094.3	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300906

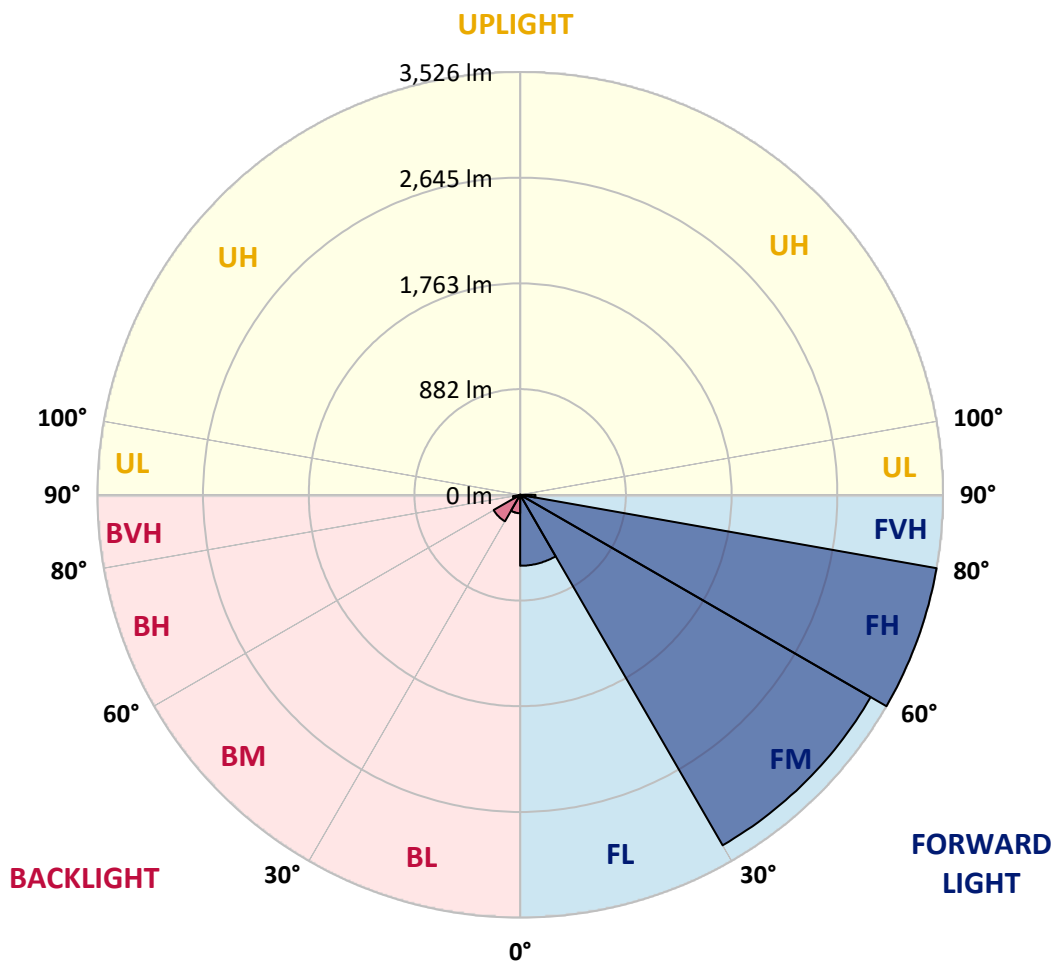
CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4-7027-800

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	591.9	7.3			
FM	(30°-60°)	3374.8	41.7			
FH	(60°-80°)	3526.2	43.6			G2/5000
FVH	(80°-90°)	127.8	1.6			G2/225
BL	(0°-30°)	153.4	1.9	B1/500		
BM	(30°-60°)	254.5	3.1	B1/1000		
BH	(60°-80°)	61.5	0.8	B0/110		G0/110
BVH	(80°-90°)	4.1	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





REPORT NUMBER: P300906

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3
2.5°	1327.8	1320.6	1316.3	1310.5	1303.3	1297.0	1294.6	1276.8	1259.9	1236.8	1210.3
5°	1352.4	1350.0	1342.3	1334.6	1325.9	1316.3	1311.0	1289.8	1265.7	1232.0	1185.7
7.5°	1354.8	1351.9	1342.3	1331.7	1319.7	1308.1	1298.9	1277.7	1255.6	1221.4	1165.0
10°	1351.0	1347.6	1340.4	1328.8	1313.9	1302.8	1293.6	1273.4	1254.6	1223.8	1161.1
12.5°	1346.6	1343.3	1339.9	1334.1	1321.1	1313.4	1305.7	1286.4	1269.5	1243.5	1175.1
15°	1351.0	1349.0	1352.9	1350.5	1343.3	1336.5	1328.8	1311.5	1296.0	1274.4	1200.6
17.5°	1369.3	1369.3	1381.3	1382.8	1376.0	1366.4	1355.3	1338.0	1325.0	1306.6	1231.0
20°	1412.2	1410.7	1426.1	1429.0	1412.6	1397.7	1381.3	1360.1	1350.0	1338.4	1260.9
22.5°	1485.9	1479.1	1488.3	1485.4	1453.1	1430.0	1409.8	1383.7	1378.4	1373.1	1294.1
25°	1581.8	1577.9	1584.2	1555.7	1498.9	1467.6	1443.5	1414.1	1414.1	1419.4	1331.7
27.5°	1721.0	1706.5	1685.3	1635.2	1550.0	1510.0	1483.9	1452.6	1460.8	1480.6	1381.3
30°	1863.6	1847.7	1799.0	1722.0	1612.1	1570.2	1539.8	1507.1	1526.3	1562.5	1447.8
32.5°	2004.3	1986.5	1917.6	1820.2	1701.2	1659.3	1629.9	1593.8	1626.1	1686.8	1545.1
35°	2140.6	2124.7	2045.2	1930.6	1819.8	1785.1	1758.1	1726.8	1768.2	1853.0	1682.5
37.5°	2293.9	2276.5	2179.7	2055.4	1963.8	1938.8	1919.0	1887.7	1960.0	2084.3	1873.7
40°	2482.2	2452.9	2322.3	2198.5	2130.5	2118.5	2105.0	2100.7	2212.9	2384.9	2128.6
42.5°	2698.1	2649.9	2471.6	2349.3	2313.6	2322.3	2318.9	2338.2	2529.5	2758.8	2438.9
45°	2913.9	2851.8	2637.9	2510.2	2515.0	2545.4	2564.1	2641.2	2926.0	3187.6	2772.8
47.5°	3097.0	3035.8	2797.3	2684.1	2741.9	2801.7	2852.7	2998.7	3333.6	3609.7	3032.5
50°	3253.6	3195.8	2966.5	2875.4	3005.5	3101.8	3184.7	3401.0	3772.0	3931.0	3214.6
52.5°	3381.8	3343.2	3141.8	3094.6	3306.6	3447.8	3569.2	3828.4	4160.4	4192.2	3356.2
55°	3506.5	3479.1	3330.2	3355.3	3660.2	3852.5	4006.2	4281.8	4494.7	4409.9	3492.1
57.5°	3650.1	3625.1	3545.1	3685.8	4125.2	4367.0	4534.7	4683.6	4789.1	4632.5	3620.3
60°	3796.6	3782.1	3784.1	4052.9	4659.0	4891.2	4983.8	5022.3	5078.2	4842.1	3627.5
62.5°	3936.3	3963.8	4057.2	4461.5	5170.2	5348.5	5395.2	5433.3	5367.7	4875.3	3351.4
65°	4172.9	4217.7	4440.8	5008.3	5732.5	5923.3	5971.4	5840.9	5413.5	4445.6	2726.0
67.5°	4288.5	4370.4	4768.4	5518.1	6277.9	6489.9	6472.0	5867.4	4858.0	3390.0	1749.4
69°	4264.4	4351.6	4844.0	5674.2	6459.0	6651.3	6538.0	5543.1	4138.7	2455.7	1073.9
70°	4169.0	4257.2	4805.0	5668.4	6482.2	6634.4	6415.7	5142.7	3499.3	1795.7	671.6
72.5°	3481.5	3557.6	4265.9	5123.5	5971.4	5847.6	5367.3	3562.9	1705.1	489.0	151.3
75°	2143.1	2185.5	3060.9	3859.7	4510.1	4192.2	3575.9	1772.5	508.3	138.3	83.8
77.5°	1132.2	1151.5	1675.7	2275.1	2859.0	2365.6	1832.8	691.4	234.2	86.7	60.7
80°	669.2	683.7	902.4	1040.2	1237.3	1033.5	732.8	424.5	167.7	54.4	54.0
82.5°	383.0	392.2	654.3	578.2	487.6	416.3	364.7	402.3	100.7	36.6	55.9
85°	140.7	142.6	368.1	439.9	290.0	172.5	181.2	333.4	27.0	23.1	43.8
87.5°	65.5	64.1	189.3	269.3	169.6	109.4	141.2	73.2	10.6	14.9	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P300906

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL4-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3	1209.3
2.5°	1194.9	1177.0	1144.8	1111.5	1077.8	1051.8	1026.2	1006.0	999.3	986.7	987.7
5°	1158.3	1125.5	1058.0	989.6	918.3	859.5	804.1	759.3	737.6	715.5	715.5
7.5°	1126.5	1078.8	973.2	861.9	746.8	649.9	562.7	497.2	461.1	432.2	431.7
10°	1114.4	1049.8	902.4	742.9	582.5	450.5	346.9	280.4	246.2	224.0	223.1
12.5°	1119.7	1039.7	848.0	633.1	431.7	289.6	200.9	158.0	143.6	136.8	136.8
15°	1135.1	1036.8	793.5	525.6	305.0	181.2	133.5	121.9	120.9	120.9	120.9
17.5°	1153.9	1037.8	737.6	421.1	207.7	129.6	115.2	113.7	114.7	114.7	114.7
20°	1173.2	1038.3	677.4	324.3	146.5	112.7	108.4	107.9	108.9	108.9	109.4
22.5°	1196.8	1040.7	617.2	242.3	120.9	106.5	103.1	103.1	103.6	103.6	103.1
25°	1223.8	1045.5	554.6	179.7	110.3	102.1	99.3	98.8	99.3	98.8	98.3
27.5°	1257.5	1052.3	484.7	140.7	105.5	97.8	95.4	95.4	94.9	94.4	94.0
30°	1299.9	1060.0	406.2	119.5	100.7	94.0	91.5	91.1	90.6	89.6	89.6
32.5°	1364.5	1076.8	328.6	108.4	95.4	88.7	86.7	86.7	85.8	84.8	84.3
35°	1463.7	1110.1	259.2	101.7	89.6	82.9	80.5	80.5	79.5	79.0	78.5
37.5°	1601.0	1160.7	201.4	95.4	83.8	76.6	74.2	73.7	72.8	71.8	71.3
40°	1783.6	1223.3	158.5	89.6	78.1	70.3	68.4	67.5	65.5	64.1	64.1
42.5°	2013.0	1294.6	128.6	83.4	71.3	64.6	63.1	61.7	58.3	56.9	56.4
45°	2252.9	1358.7	108.9	76.1	64.6	58.8	57.8	55.4	51.1	49.6	49.6
47.5°	2425.9	1373.6	95.9	69.4	58.3	52.5	52.0	47.7	43.8	42.9	42.4
50°	2533.8	1344.2	85.3	62.6	52.5	46.7	45.3	40.0	37.6	36.6	36.1
52.5°	2606.5	1291.7	76.6	56.9	47.2	41.4	38.1	34.2	32.3	31.3	31.3
55°	2664.8	1217.5	67.9	51.6	42.9	37.1	32.3	29.4	27.5	26.5	26.5
57.5°	2681.2	1116.8	59.3	47.2	38.5	32.8	27.5	25.5	23.1	22.6	22.6
60°	2562.2	935.2	52.5	41.9	34.7	28.4	24.1	21.7	19.3	18.8	18.3
62.5°	2248.6	723.7	46.3	37.1	30.4	24.6	20.7	17.8	15.9	15.9	15.9
65°	1715.2	485.2	40.5	32.3	26.5	20.7	17.8	14.5	13.5	13.5	14.0
67.5°	1026.7	264.0	34.7	27.5	22.6	17.3	14.9	12.5	12.0	12.5	12.5
69°	601.8	155.1	31.3	24.6	19.8	15.4	13.0	11.1	12.0	12.5	12.5
70°	371.5	104.6	28.9	22.2	17.8	14.0	12.0	10.6	11.6	12.0	12.0
72.5°	103.6	54.0	23.1	17.3	14.5	11.6	9.6	9.6	11.1	11.6	11.6
75°	67.5	40.0	17.8	13.0	11.1	9.2	8.2	9.2	10.6	11.1	11.1
77.5°	55.9	32.8	14.5	10.6	9.2	8.7	7.7	8.2	9.6	10.1	10.1
80°	51.1	23.1	11.6	9.6	8.2	7.7	7.2	6.7	8.7	9.2	9.2
82.5°	48.7	18.3	10.1	8.7	7.7	6.7	6.3	6.7	7.7	8.2	8.7
85°	30.4	12.0	9.2	8.2	6.7	6.3	6.3	6.3	7.2	7.7	7.7
87.5°	11.1	9.6	8.2	6.7	5.8	5.8	5.8	5.8	6.3	7.2	7.2
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)