

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: P301872

Luminaire Tested: **GLNA-AF-03-LED-E1-SL4-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301872
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-03-LED-E1-SL4-7027-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K 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: 9406.1 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 124
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

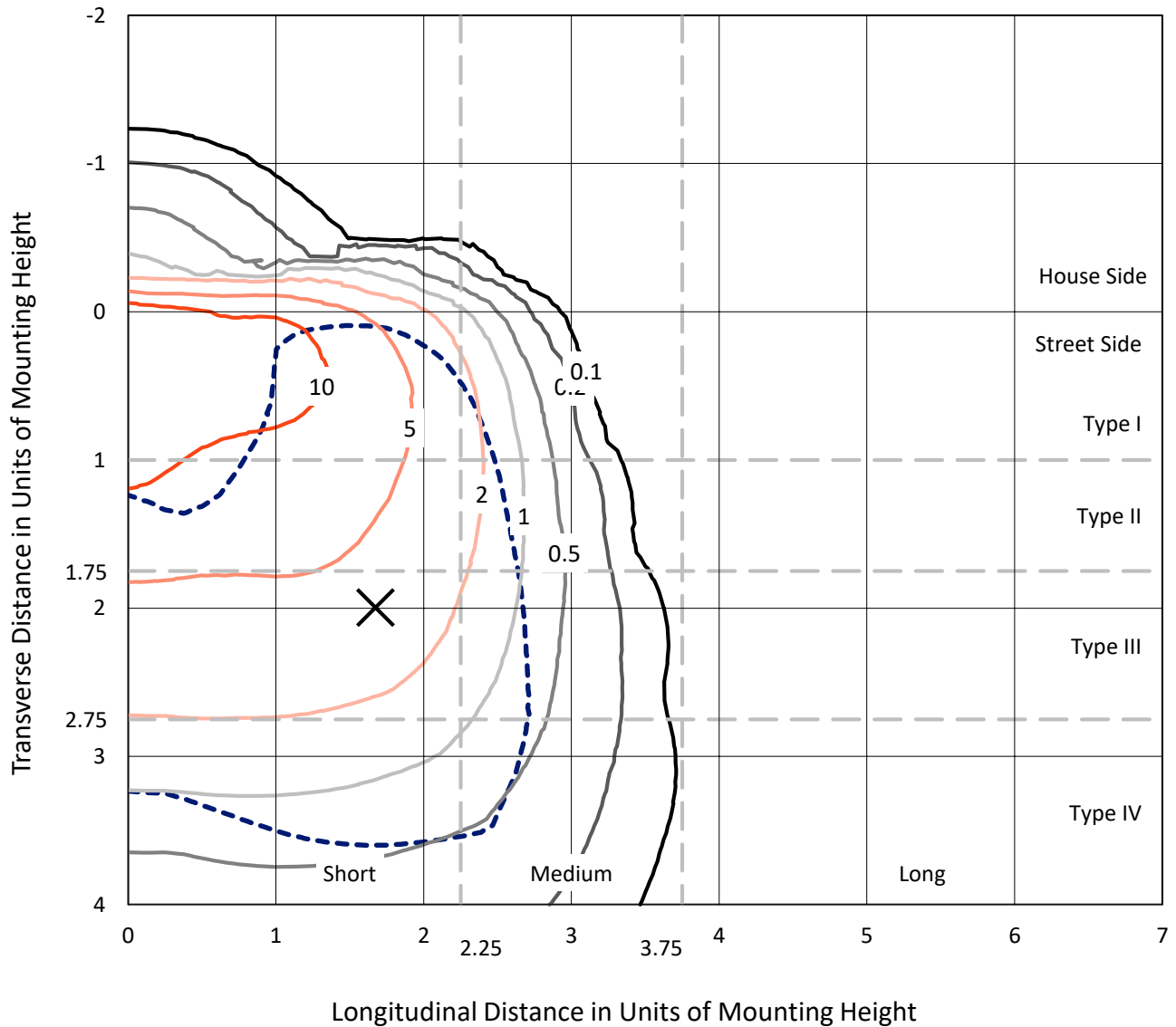


REPORT NUMBER: P301872

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL4-7027-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

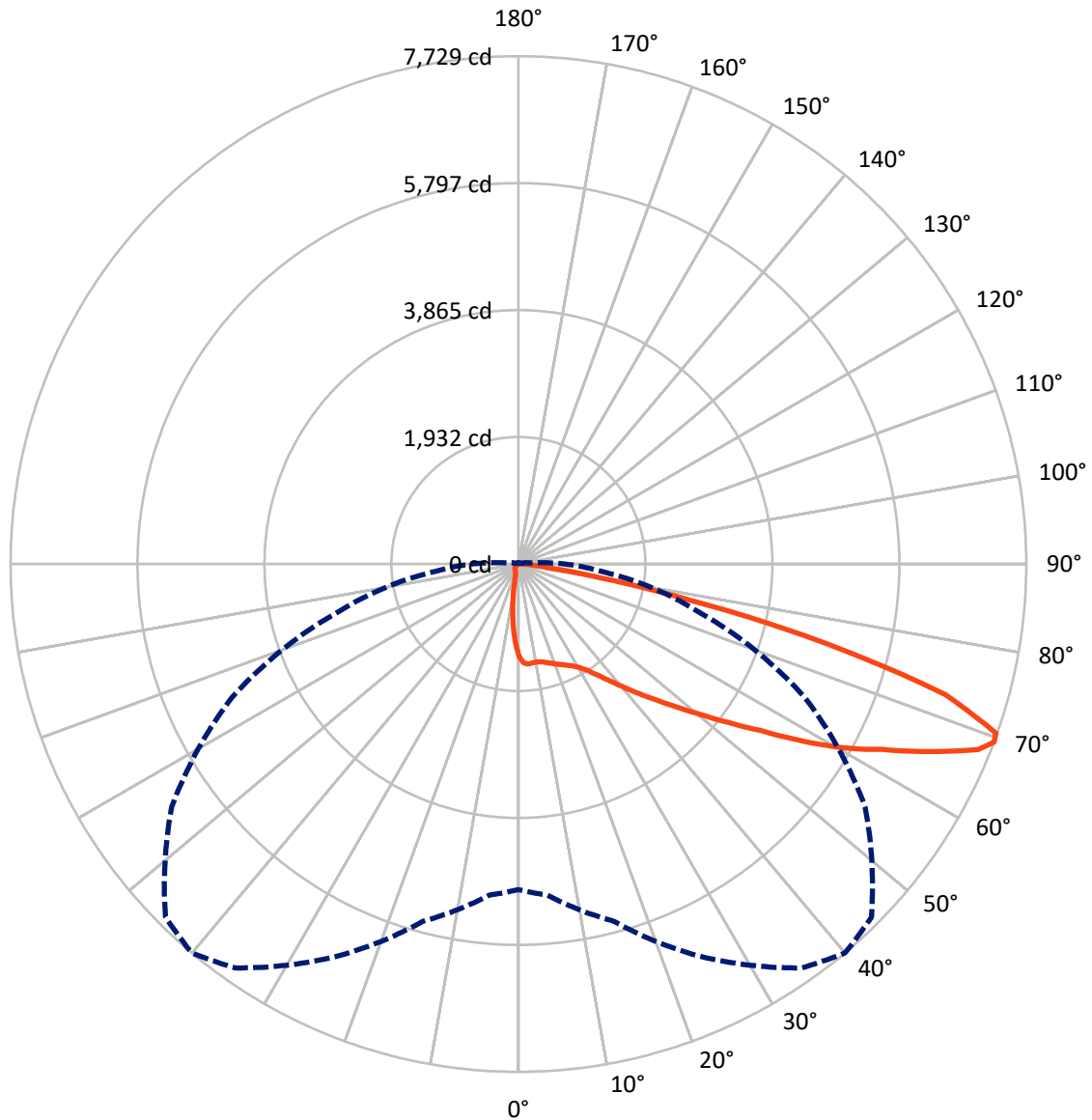


Based on 10 foot mounting height. Maximum calculated value = 15.4 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P301872

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL4-7027-800-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P301872

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL4-7027-800-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	550.3	0.0	550.3
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	8855.8	0.0	8855.8
	% Fixture	94.1	0.0	94.1
Total	Lumens	9406.1	0.0	9406.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.9	1.2
10°-20°	280.2	3.0
20°-30°	472.0	5.0
30°-40°	772.6	8.2
40°-50°	1337.8	14.2
50°-60°	2107.1	22.4
60°-70°	2751.8	29.3
70°-80°	1417.3	15.1
80°-90°	153.3	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°	9406.1	100.0
0°-180°	9406.1	100.0



REPORT NUMBER: P301872

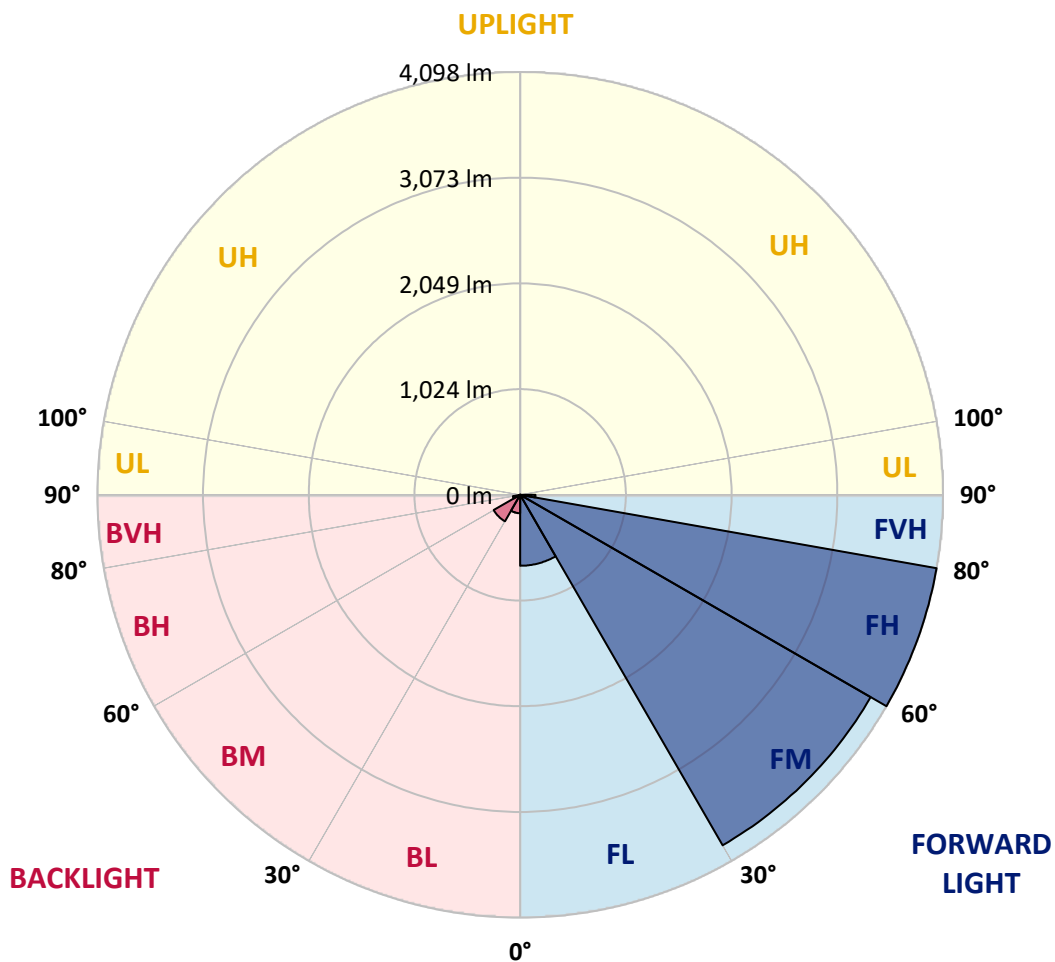
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL4-7027-800-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	687.9	7.3			
FM	(30°-60°)	3921.8	41.7			
FH	(60°-80°)	4097.7	43.6			G2/5000
FVH	(80°-90°)	148.5	1.6			G2/225
BL	(0°-30°)	178.3	1.9	B1/500		
BM	(30°-60°)	295.8	3.1	B1/1000		
BH	(60°-80°)	71.5	0.8	B0/110		G0/110
BVH	(80°-90°)	4.8	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: P301872

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL4-7027-800-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3
2.5°	1543.1	1534.7	1529.6	1522.9	1514.5	1507.2	1504.4	1483.7	1464.1	1437.2	1406.4
5°	1571.6	1568.8	1559.9	1550.9	1540.8	1529.6	1523.5	1498.8	1470.8	1431.6	1377.9
7.5°	1574.4	1571.1	1559.9	1547.5	1533.5	1520.1	1509.5	1484.8	1459.1	1419.3	1353.8
10°	1569.9	1566.0	1557.6	1544.2	1526.8	1513.9	1503.3	1479.8	1458.0	1422.1	1349.3
12.5°	1564.9	1561.0	1557.1	1550.3	1535.2	1526.3	1517.3	1494.9	1475.3	1445.1	1365.6
15°	1569.9	1567.7	1572.2	1569.4	1561.0	1553.1	1544.2	1524.0	1506.1	1480.9	1395.2
17.5°	1591.2	1591.2	1605.2	1606.9	1599.0	1587.9	1575.0	1554.8	1539.7	1518.4	1430.5
20°	1641.0	1639.4	1657.3	1660.6	1641.6	1624.2	1605.2	1580.6	1568.8	1555.4	1465.2
22.5°	1726.7	1718.9	1729.5	1726.1	1688.6	1661.8	1638.2	1608.0	1601.8	1595.7	1503.9
25°	1838.1	1833.6	1840.9	1807.9	1741.8	1705.4	1677.4	1643.3	1643.3	1649.4	1547.5
27.5°	1999.9	1983.1	1958.5	1900.3	1801.2	1754.7	1724.5	1688.1	1697.6	1720.5	1605.2
30°	2165.7	2147.2	2090.6	2001.1	1873.4	1824.7	1789.4	1751.3	1773.7	1815.7	1682.5
32.5°	2329.1	2308.4	2228.4	2115.3	1977.0	1928.3	1894.1	1852.1	1889.6	1960.2	1795.6
35°	2487.6	2469.1	2376.7	2243.5	2114.7	2074.4	2043.0	2006.6	2054.8	2153.3	1955.1
37.5°	2665.6	2645.5	2532.9	2388.5	2282.1	2253.0	2230.0	2193.7	2277.6	2422.1	2177.4
40°	2884.6	2850.4	2698.7	2554.8	2475.8	2461.8	2446.2	2441.1	2571.6	2771.5	2473.6
42.5°	3135.4	3079.4	2872.2	2730.0	2688.6	2698.7	2694.8	2717.2	2939.4	3205.9	2834.2
45°	3386.2	3314.0	3065.4	2917.0	2922.6	2957.9	2979.7	3069.3	3400.2	3704.2	3222.2
47.5°	3599.0	3527.9	3250.7	3119.2	3186.3	3255.8	3315.1	3484.8	3873.9	4194.7	3524.0
50°	3780.9	3713.8	3447.2	3341.4	3492.6	3604.6	3700.9	3952.3	4383.4	4568.2	3735.6
52.5°	3929.9	3885.1	3651.0	3596.2	3842.5	4006.6	4147.7	4448.9	4834.7	4871.6	3900.2
55°	4074.9	4043.0	3870.0	3899.1	4253.5	4476.9	4655.5	4975.8	5223.2	5124.7	4058.1
57.5°	4241.7	4212.6	4119.7	4283.2	4793.8	5074.9	5269.7	5442.7	5565.3	5383.4	4207.0
60°	4411.9	4395.1	4397.4	4709.8	5414.1	5684.0	5791.5	5836.3	5901.3	5626.9	4215.4
62.5°	4574.3	4606.2	4714.8	5184.6	6008.2	6215.3	6269.7	6313.9	6237.7	5665.5	3894.6
65°	4849.2	4901.3	5160.5	5820.1	6661.6	6883.3	6939.3	6787.6	6290.9	5166.1	3167.9
67.5°	4983.6	5078.8	5541.2	6412.4	7295.4	7541.7	7521.0	6818.4	5645.4	3939.4	2033.0
69°	4955.6	5056.9	5629.1	6593.8	7505.9	7729.3	7597.7	6441.5	4809.5	2853.8	1248.0
70°	4844.7	4947.2	5583.8	6587.1	7532.8	7709.7	7455.5	5976.3	4066.5	2086.7	780.5
72.5°	4045.8	4134.2	4957.3	5953.9	6939.3	6795.4	6237.2	4140.4	1981.5	568.3	175.8
75°	2490.4	2539.7	3557.0	4485.3	5241.1	4871.6	4155.5	2059.8	590.7	160.7	97.4
77.5°	1315.7	1338.1	1947.3	2643.8	3322.4	2749.1	2129.8	803.4	272.1	100.8	70.5
80°	777.7	794.5	1048.7	1208.8	1437.8	1201.0	851.6	493.3	194.8	63.3	62.7
82.5°	445.1	455.8	760.3	671.9	566.6	483.7	423.8	467.5	117.0	42.6	64.9
85°	163.5	165.7	427.8	511.2	337.1	200.4	210.5	387.4	31.4	26.9	51.0
87.5°	76.1	74.5	220.0	313.0	197.1	127.1	164.0	85.1	12.3	17.4	14.0
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: P301872

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL4-7027-800-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3	1405.3
2.5°	1388.5	1367.8	1330.3	1291.7	1252.5	1222.2	1192.6	1169.1	1161.2	1146.7	1147.8
5°	1346.0	1307.9	1229.5	1150.0	1067.2	998.8	934.5	882.4	857.2	831.4	831.4
7.5°	1309.0	1253.6	1131.0	1001.6	867.8	755.3	654.0	577.8	535.8	502.2	501.7
10°	1295.0	1220.0	1048.7	863.4	676.9	523.5	403.1	325.9	286.1	260.3	259.2
12.5°	1301.2	1208.2	985.4	735.7	501.7	336.5	233.5	183.6	166.8	159.0	159.0
15°	1319.1	1204.9	922.1	610.8	354.4	210.5	155.1	141.7	140.5	140.5	140.5
17.5°	1340.9	1206.0	857.2	489.3	241.3	150.6	133.8	132.1	133.3	133.3	133.3
20°	1363.3	1206.6	787.2	376.8	170.2	131.0	126.0	125.4	126.5	126.5	127.1
22.5°	1390.8	1209.4	717.2	281.6	140.5	123.7	119.8	119.8	120.4	120.4	119.8
25°	1422.1	1215.0	644.4	208.8	128.2	118.7	115.3	114.8	115.3	114.8	114.2
27.5°	1461.3	1222.8	563.3	163.5	122.6	113.7	110.9	110.9	110.3	109.7	109.2
30°	1510.6	1231.8	472.0	138.9	117.0	109.2	106.4	105.8	105.3	104.1	104.1
32.5°	1585.6	1251.4	381.8	126.0	110.9	103.0	100.8	100.8	99.7	98.5	98.0
35°	1700.9	1290.0	301.2	118.1	104.1	96.3	93.5	93.5	92.4	91.8	91.3
37.5°	1860.5	1348.8	234.0	110.9	97.4	89.0	86.2	85.7	84.5	83.4	82.9
40°	2072.7	1421.6	184.2	104.1	90.7	81.7	79.5	78.4	76.1	74.5	74.5
42.5°	2339.2	1504.4	149.5	96.9	82.9	75.0	73.3	71.7	67.7	66.1	65.5
45°	2618.1	1578.9	126.5	88.5	75.0	68.3	67.2	64.4	59.3	57.7	57.7
47.5°	2819.1	1596.2	111.4	80.6	67.7	61.0	60.5	55.4	51.0	49.8	49.3
50°	2944.5	1562.1	99.1	72.8	61.0	54.3	52.6	46.5	43.7	42.6	42.0
52.5°	3029.0	1501.1	89.0	66.1	54.9	48.2	44.2	39.8	37.5	36.4	36.4
55°	3096.8	1414.8	78.9	59.9	49.8	43.1	37.5	34.2	31.9	30.8	30.8
57.5°	3115.8	1297.8	68.9	54.9	44.8	38.1	31.9	29.7	26.9	26.3	26.3
60°	2977.5	1086.7	61.0	48.7	40.3	33.0	28.0	25.2	22.4	21.8	21.3
62.5°	2613.0	841.0	53.7	43.1	35.3	28.6	24.1	20.7	18.5	18.5	18.5
65°	1993.2	563.8	47.0	37.5	30.8	24.1	20.7	16.8	15.7	15.7	16.2
67.5°	1193.1	306.8	40.3	31.9	26.3	20.2	17.4	14.6	14.0	14.6	14.6
69°	699.3	180.3	36.4	28.6	23.0	17.9	15.1	12.9	14.0	14.6	14.6
70°	431.7	121.5	33.6	25.8	20.7	16.2	14.0	12.3	13.4	14.0	14.0
72.5°	120.4	62.7	26.9	20.2	16.8	13.4	11.2	11.2	12.9	13.4	13.4
75°	78.4	46.5	20.7	15.1	12.9	10.6	9.5	10.6	12.3	12.9	12.9
77.5°	64.9	38.1	16.8	12.3	10.6	10.1	9.0	9.5	11.2	11.8	11.8
80°	59.3	26.9	13.4	11.2	9.5	9.0	8.4	7.8	10.1	10.6	10.6
82.5°	56.5	21.3	11.8	10.1	9.0	7.8	7.3	7.8	9.0	9.5	10.1
85°	35.3	14.0	10.6	9.5	7.8	7.3	7.3	7.3	8.4	9.0	9.0
87.5°	12.9	11.2	9.5	7.8	6.7	6.7	6.7	6.7	7.3	8.4	8.4
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)