

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-03-LED-E1-SL3-7027-800-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-03-LED-E1-SL3-7027-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 800mA 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: 9898.8 lumens  
Efficiency: N/A  
Efficacy: 79.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-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

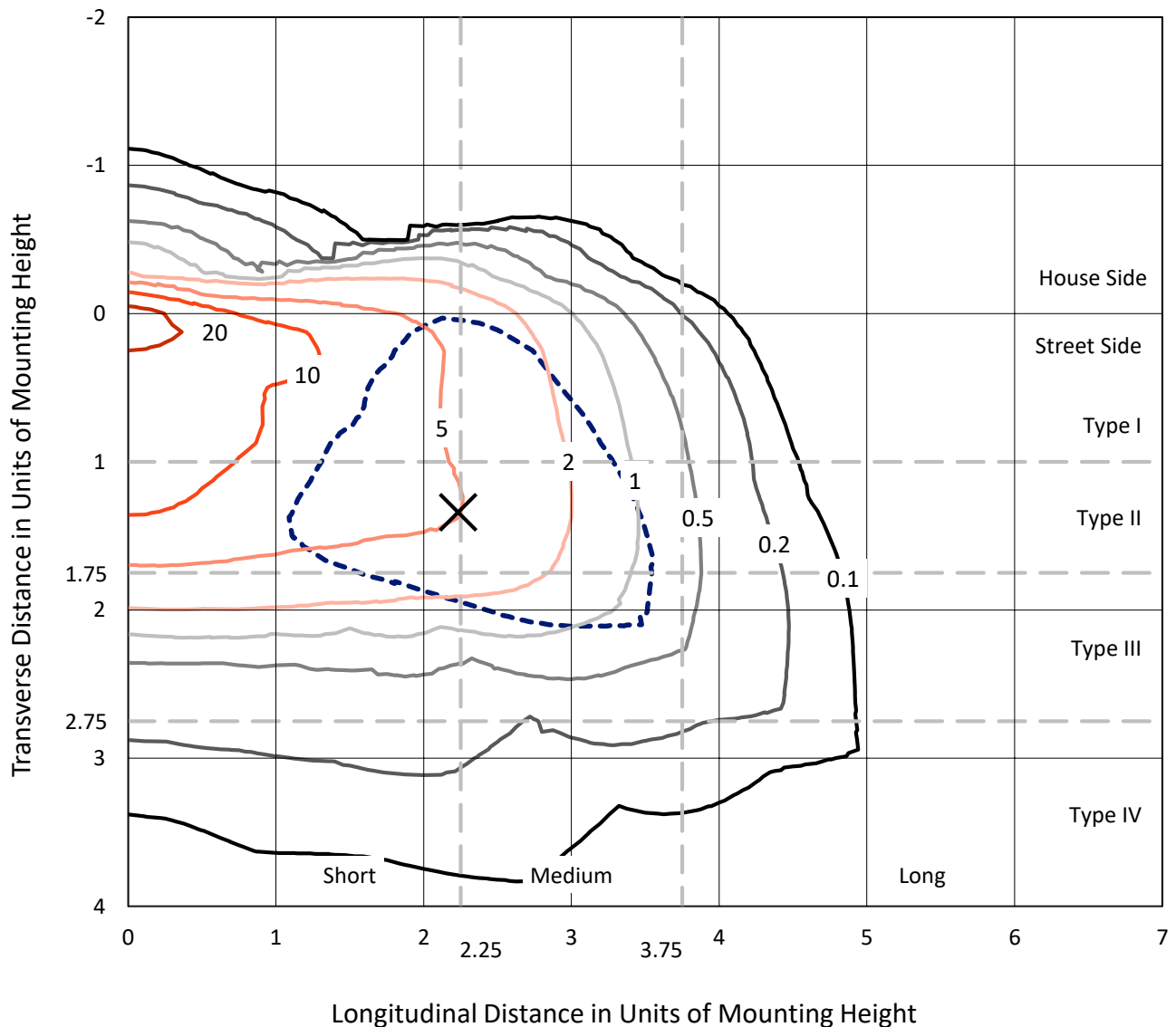


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

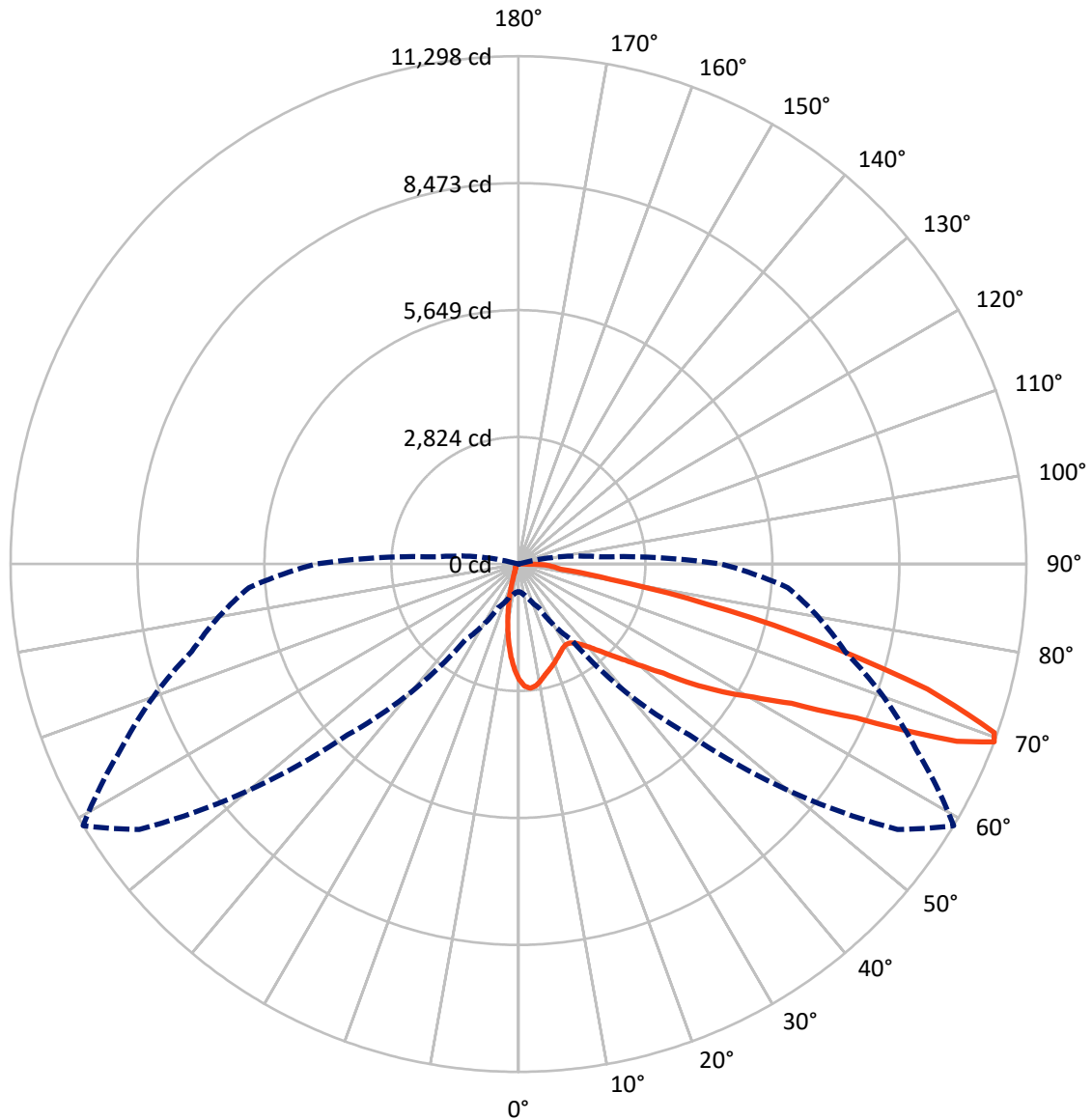


Based on 10 foot mounting height. Maximum calculated value = 25.9 fc  
 Type III - Short - Non-Cutoff

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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
<b>House Side</b>	Lumens	806.1	0.0	806.1
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	9092.6	0.0	9092.6
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	9898.8	0.0	9898.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.1	2.1
10°-20°	432.1	4.4
20°-30°	581.5	5.9
30°-40°	844.3	8.5
40°-50°	1405.8	14.2
50°-60°	2193.0	22.2
60°-70°	2713.7	27.4
70°-80°	1375.3	13.9
80°-90°	143.9	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°	9898.8	100.0
0°-180°	9898.8	100.0



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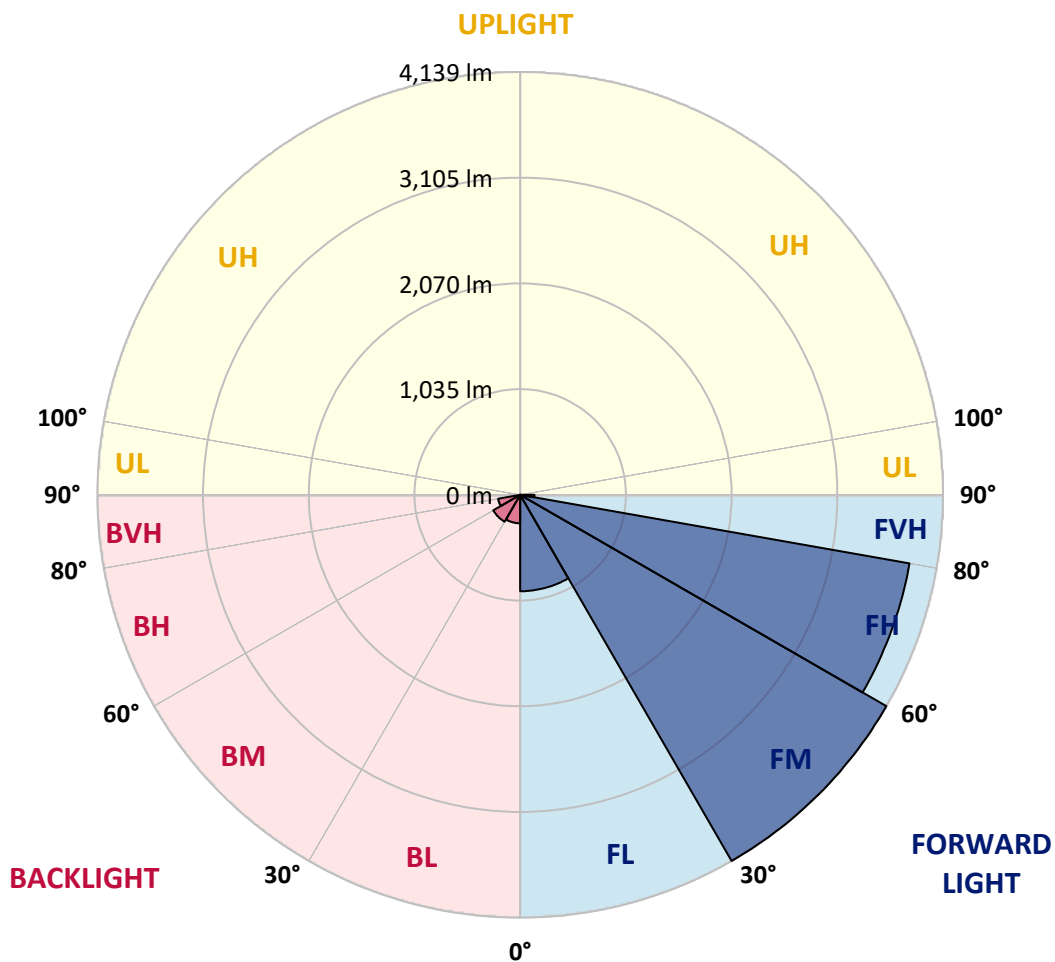
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	943.7	9.5			
FM	(30°-60°)	4139.4	41.8			
FH	(60°-80°)	3870.0	39.1			G2/5000
FVH	(80°-90°)	139.5	1.4			G2/225
BL	(0°-30°)	279.0	2.8	B1/500		
BM	(30°-60°)	303.7	3.1	B1/1000		
BH	(60°-80°)	218.9	2.2	B1/500		G1/500
BVH	(80°-90°)	4.4	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°	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4
2.5°	2823.9	2822.9	2810.5	2804.9	2794.7	2773.5	2740.5	2723.2	2695.2	2646.4	2581.0
5°	2798.1	2811.7	2818.8	2819.5	2826.8	2818.8	2789.1	2774.7	2736.1	2657.6	2540.2
7.5°	2623.6	2628.5	2649.3	2667.1	2701.9	2734.9	2745.6	2739.3	2716.4	2632.5	2476.3
10°	2436.6	2441.5	2466.3	2489.7	2536.8	2587.6	2641.4	2652.7	2662.2	2596.6	2414.8
12.5°	2275.3	2280.4	2305.6	2336.3	2391.2	2453.9	2537.3	2555.8	2597.8	2562.6	2365.5
15°	2136.5	2138.7	2163.4	2201.4	2267.0	2347.5	2442.2	2471.9	2536.3	2538.5	2322.4
17.5°	2018.4	2024.0	2039.2	2075.5	2147.2	2246.8	2357.2	2399.7	2475.1	2518.3	2280.4
20°	1946.2	1951.8	1951.3	1971.4	2035.8	2142.1	2272.1	2322.9	2414.8	2497.6	2242.9
22.5°	1932.3	1932.3	1917.7	1914.8	1953.0	2041.9	2183.6	2245.6	2360.4	2488.7	2216.7
25°	1982.1	1979.7	1943.5	1913.8	1915.5	1968.6	2097.9	2171.8	2314.6	2494.8	2202.6
27.5°	2087.4	2084.5	2038.6	1982.1	1936.7	1936.2	2033.0	2112.4	2278.2	2523.9	2208.2
30°	2232.8	2231.7	2181.9	2110.7	2028.6	1953.0	2010.6	2082.8	2254.6	2576.4	2221.1
32.5°	2391.7	2390.0	2352.6	2277.7	2173.4	2028.6	2034.1	2094.6	2261.4	2646.4	2252.4
35°	2560.3	2557.5	2541.2	2475.8	2361.1	2167.9	2111.4	2158.4	2303.9	2751.2	2313.9
37.5°	2742.7	2745.6	2757.3	2694.6	2574.2	2363.3	2240.7	2272.6	2389.5	2893.4	2414.1
40°	3012.0	3011.5	3015.4	2933.0	2817.3	2602.2	2421.4	2431.6	2532.9	3082.0	2566.4
42.5°	3500.6	3466.5	3363.0	3195.0	3078.6	2875.4	2649.3	2638.6	2708.1	3315.3	2779.6
45°	4157.3	4084.4	3815.8	3494.0	3345.0	3183.3	2929.6	2895.6	2939.8	3595.8	3042.8
47.5°	4721.9	4646.3	4266.4	3805.1	3627.7	3475.5	3258.2	3196.7	3211.3	3909.8	3376.3
50°	4913.9	4877.0	4545.2	4076.1	3901.4	3843.2	3639.5	3564.5	3543.8	4273.0	3763.1
52.5°	4847.3	4844.6	4623.5	4251.8	4152.2	4223.9	4119.1	4032.4	3956.3	4656.0	4156.6
55°	4740.4	4754.5	4655.3	4405.7	4402.3	4571.4	4775.1	4703.0	4482.5	5071.9	4495.9
57.5°	4445.5	4505.4	4637.5	4696.9	4834.5	5007.5	5321.5	5364.1	5103.2	5390.3	4777.3
60°	3607.0	3738.5	4170.6	4738.7	5391.5	5822.5	5980.9	6017.2	5612.5	5655.0	5157.5
62.5°	2560.3	2694.6	3242.6	4203.7	5399.8	6893.2	6963.2	6820.5	6173.4	6047.5	5813.0
65°	1359.0	1462.7	1910.4	3034.4	4681.8	7141.8	8681.1	8255.7	7163.0	6819.3	6659.8
67.5°	695.2	726.5	904.6	1485.1	3218.6	6343.6	10220.9	10520.3	8868.5	7585.1	6619.0
69°	615.2	633.6	751.8	1073.6	2060.9	5373.0	10296.0	11297.9	9761.5	7521.2	6015.0
70°	595.5	611.8	719.2	971.7	1611.0	4505.9	10008.7	11229.6	9989.7	7278.4	5563.9
72.5°	505.5	519.4	640.4	858.7	1309.3	2236.7	8130.3	9515.7	8964.3	6063.1	4027.3
75°	338.1	384.0	614.7	805.0	1218.0	1270.7	5360.2	6876.4	6387.8	4089.5	2097.9
77.5°	81.2	87.3	173.5	640.4	1113.9	1118.3	2756.8	4274.7	3486.7	1457.6	495.9
80°	43.7	42.0	48.6	127.1	1037.2	1049.5	1241.0	2075.0	1244.9	241.8	163.4
82.5°	30.8	29.1	31.4	53.2	326.4	956.0	897.9	939.2	516.0	92.9	73.4
85°	11.2	10.7	17.3	48.1	102.4	549.6	922.4	774.6	418.1	42.5	53.7
87.5°	3.9	3.4	6.8	26.3	31.4	234.0	569.2	585.5	164.6	25.8	25.3
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°	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4	2576.4
2.5°	2553.6	2518.8	2455.1	2389.5	2329.0	2256.3	2219.9	2184.1	2169.0	2163.4	2137.2
5°	2479.7	2420.9	2285.5	2149.4	2024.0	1890.8	1803.0	1732.5	1691.0	1670.8	1638.9
7.5°	2385.1	2288.9	2083.3	1873.5	1678.1	1485.6	1342.9	1233.1	1157.5	1121.2	1088.2
10°	2293.3	2165.1	1873.0	1586.9	1321.5	1066.3	869.2	726.5	635.3	593.3	566.5
12.5°	2211.1	2044.8	1669.8	1307.6	974.5	675.7	475.2	361.6	305.0	285.4	275.9
15°	2137.7	1934.0	1477.8	1042.2	659.9	386.2	259.8	221.2	212.2	212.2	211.0
17.5°	2068.2	1825.4	1292.4	793.1	414.2	236.2	197.6	192.5	192.5	194.7	194.7
20°	2001.6	1721.8	1113.2	569.2	260.8	187.4	178.6	177.4	178.6	181.3	181.3
22.5°	1944.5	1627.8	946.0	390.6	193.7	169.0	164.6	162.9	163.4	165.1	166.2
25°	1902.0	1548.3	788.2	264.7	166.8	153.9	149.0	146.1	143.9	143.9	144.9
27.5°	1875.2	1481.2	635.3	192.5	150.0	140.0	132.0	127.6	122.5	119.8	120.8
30°	1855.5	1417.3	492.0	157.3	134.4	124.2	114.2	106.9	99.6	96.3	97.4
32.5°	1848.2	1365.8	367.7	138.8	120.3	109.1	96.8	87.3	79.5	76.6	77.3
35°	1867.9	1324.9	269.3	125.4	109.1	95.1	81.2	70.5	64.4	62.7	63.2
37.5°	1919.4	1303.1	201.5	114.2	99.1	83.4	67.8	57.6	53.7	53.7	54.2
40°	2016.7	1302.5	161.8	106.4	90.2	72.2	55.9	48.6	46.4	47.6	48.1
42.5°	2158.9	1332.2	141.0	99.1	82.4	61.5	46.4	41.4	40.8	42.0	42.5
45°	2353.1	1386.4	129.8	92.9	73.9	51.5	39.1	35.8	35.8	37.5	38.1
47.5°	2591.0	1465.9	120.3	86.8	65.4	43.0	33.6	31.4	31.9	33.6	34.1
50°	2877.6	1566.2	110.8	80.0	59.3	35.8	29.1	27.5	28.0	30.2	30.8
52.5°	3204.0	1701.1	103.0	73.9	51.5	29.7	24.6	23.6	24.6	26.9	27.5
55°	3483.8	1822.0	93.5	68.8	41.4	24.6	20.2	20.2	21.4	24.1	24.6
57.5°	3753.1	1948.4	85.1	59.3	32.5	19.7	16.8	17.3	19.0	21.9	22.4
60°	4148.3	2162.8	75.1	49.8	24.6	15.6	14.1	14.6	16.8	19.7	20.2
62.5°	4819.4	2489.2	64.9	41.4	19.0	12.4	11.2	12.4	15.1	18.5	19.0
65°	5425.1	2621.9	53.2	34.7	14.6	9.5	9.5	11.2	14.6	18.0	18.5
67.5°	5087.5	2207.0	41.4	27.5	11.2	7.3	7.8	10.7	14.1	18.0	18.5
69°	4499.2	1804.7	35.2	21.9	9.5	6.8	7.3	10.7	14.1	17.3	18.0
70°	4040.8	1523.7	31.4	18.5	8.5	6.8	7.3	10.0	14.1	17.3	18.0
72.5°	2706.4	822.8	25.3	13.4	7.8	6.1	6.1	10.0	13.4	16.8	17.3
75°	1163.1	227.3	20.2	9.5	6.8	5.6	5.6	9.5	12.9	16.3	17.3
77.5°	212.7	57.6	16.3	8.5	6.8	5.6	5.1	9.0	12.4	15.6	16.3
80°	84.6	28.5	12.9	7.3	6.1	5.1	4.4	8.5	11.7	15.1	15.6
82.5°	51.0	16.3	10.7	6.8	6.1	4.4	3.9	7.3	11.2	14.6	15.1
85°	41.4	11.2	8.5	6.8	5.6	4.4	3.4	6.8	10.0	14.1	14.6
87.5°	20.2	7.8	7.8	6.1	5.6	4.4	3.4	6.1	9.5	13.4	14.1
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)