

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-SL3-7027-600-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-03-LED-E1-SL3-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 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: 8071.6 lumens
Efficiency: N/A
Efficacy: 84.1 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): 96
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

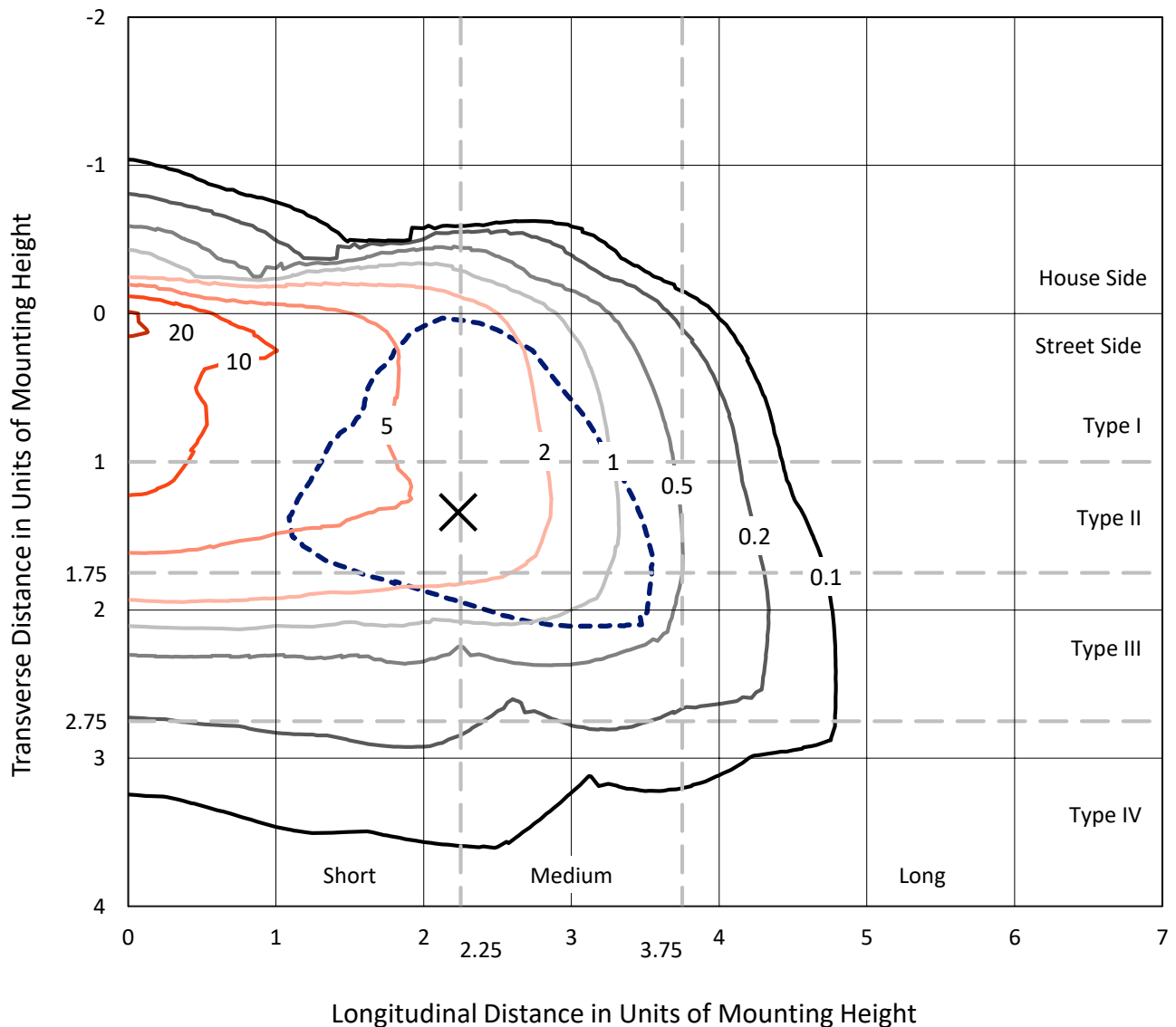


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

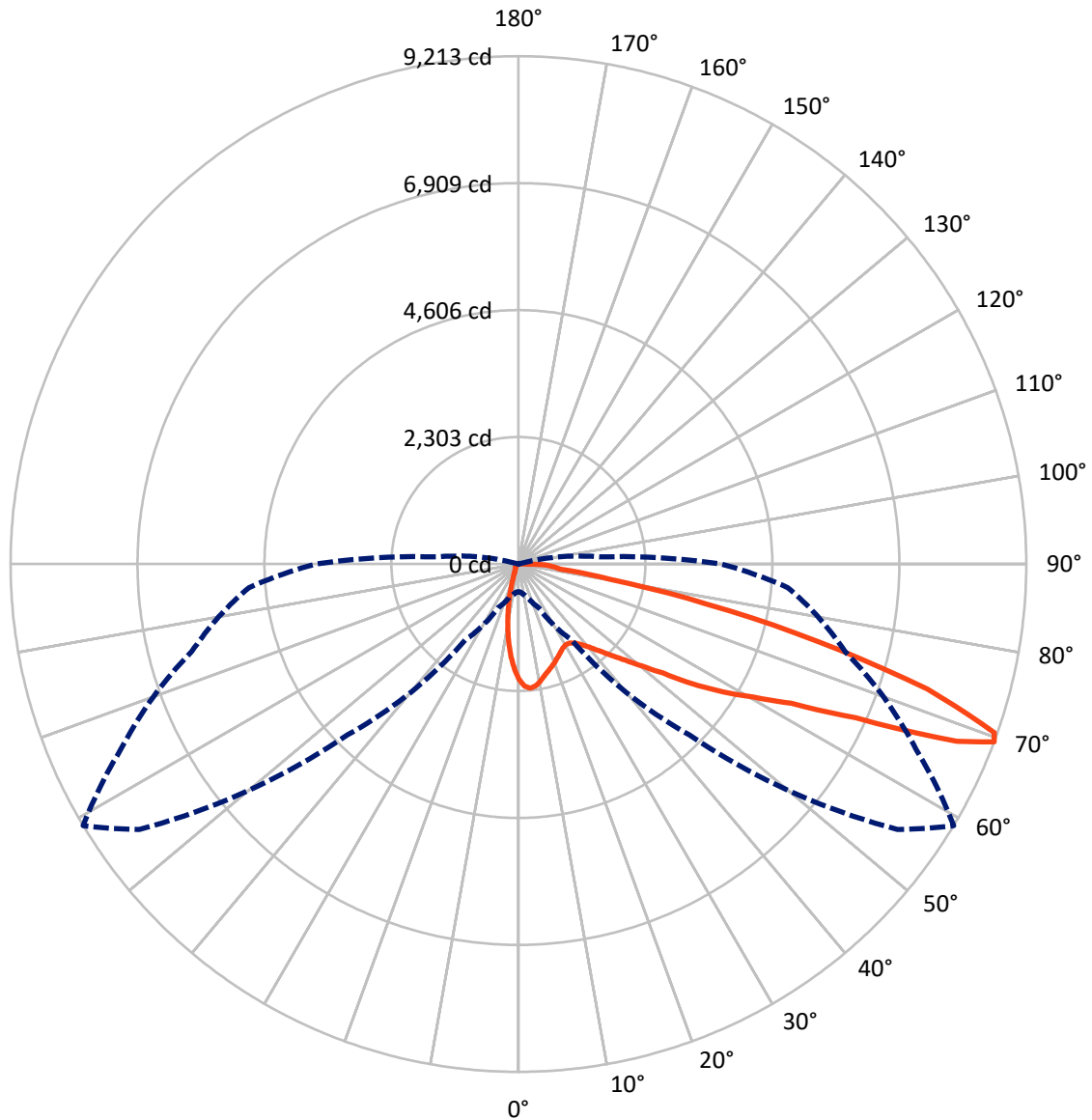


Based on 10 foot mounting height. Maximum calculated value = 21.1 fc
 Type III - Short - Non-Cutoff

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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	657.3	0.0	657.3
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	7414.3	0.0	7414.3
	% Fixture	91.9	0.0	91.9
Total	Lumens	8071.6	0.0	8071.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.5	2.1
10°-20°	352.4	4.4
20°-30°	474.2	5.9
30°-40°	688.4	8.5
40°-50°	1146.3	14.2
50°-60°	1788.2	22.2
60°-70°	2212.8	27.4
70°-80°	1121.4	13.9
80°-90°	117.3	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°	8071.6	100.0
0°-180°	8071.6	100.0



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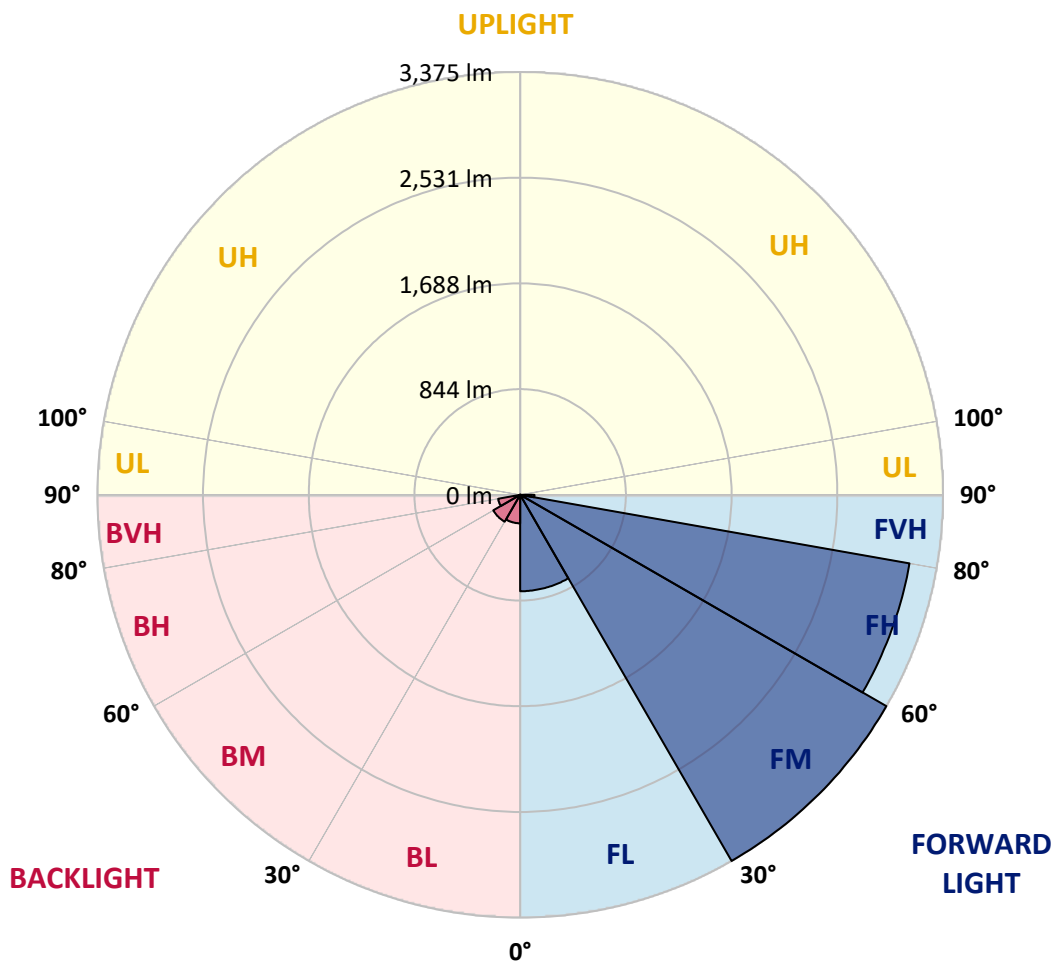
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	769.5	9.5			
FM (30°-60°)	3375.3	41.8			
FH (60°-80°)	3155.7	39.1			G2/5000
FVH (80°-90°)	113.7	1.4			G2/225
BL (0°-30°)	227.5	2.8	B1/500		
BM (30°-60°)	247.7	3.1	B1/1000		
BH (60°-80°)	178.5	2.2	B1/500		G1/500
BVH (80°-90°)	3.6	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°	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9
2.5°	2302.6	2301.8	2291.7	2287.2	2278.9	2261.6	2234.7	2220.6	2197.8	2158.0	2104.6
5°	2281.6	2292.7	2298.5	2299.1	2305.0	2298.5	2274.3	2262.6	2231.1	2167.1	2071.3
7.5°	2139.3	2143.3	2160.3	2174.8	2203.2	2230.1	2238.8	2233.7	2215.0	2146.6	2019.2
10°	1986.9	1990.9	2011.1	2030.1	2068.6	2110.0	2153.8	2163.1	2170.8	2117.3	1969.1
12.5°	1855.3	1859.5	1880.1	1905.1	1949.9	2001.0	2069.0	2084.0	2118.3	2089.6	1928.8
15°	1742.2	1743.9	1764.1	1795.1	1848.6	1914.2	1991.4	2015.6	2068.1	2069.9	1893.7
17.5°	1645.8	1650.4	1662.8	1692.4	1750.9	1832.1	1922.1	1956.8	2018.3	2053.5	1859.5
20°	1587.0	1591.5	1591.1	1607.6	1660.1	1746.7	1852.7	1894.2	1969.1	2036.6	1828.9
22.5°	1575.6	1575.6	1563.7	1561.4	1592.5	1665.0	1780.6	1831.1	1924.7	2029.3	1807.5
25°	1616.3	1614.3	1584.8	1560.6	1562.0	1605.2	1710.6	1770.9	1887.4	2034.3	1796.0
27.5°	1702.1	1699.7	1662.3	1616.3	1579.2	1578.8	1657.7	1722.5	1857.7	2058.1	1800.6
30°	1820.6	1819.8	1779.2	1721.1	1654.1	1592.5	1639.5	1698.3	1838.5	2100.9	1811.1
32.5°	1950.3	1948.9	1918.3	1857.3	1772.3	1654.1	1658.7	1708.0	1844.0	2158.0	1836.7
35°	2087.8	2085.4	2072.1	2018.8	1925.3	1767.7	1721.7	1760.0	1878.7	2243.4	1886.8
37.5°	2236.5	2238.8	2248.3	2197.2	2099.1	1927.0	1827.1	1853.1	1948.5	2359.3	1968.5
40°	2456.0	2455.6	2458.8	2391.6	2297.3	2121.9	1974.4	1982.7	2065.4	2513.1	2092.7
42.5°	2854.4	2826.7	2742.2	2605.3	2510.3	2344.7	2160.3	2151.6	2208.3	2703.4	2266.6
45°	3389.9	3330.5	3111.5	2849.0	2727.6	2595.7	2388.9	2361.1	2397.2	2932.1	2481.2
47.5°	3850.4	3788.7	3478.9	3102.8	2958.1	2834.0	2656.8	2606.7	2618.5	3188.2	2753.1
50°	4006.9	3976.8	3706.2	3323.7	3181.3	3133.9	2967.8	2906.5	2889.7	3484.3	3068.5
52.5°	3952.6	3950.4	3770.1	3467.0	3385.8	3444.2	3358.8	3288.1	3226.0	3796.6	3389.4
55°	3865.4	3876.9	3796.1	3592.5	3589.7	3727.7	3893.8	3834.9	3655.1	4135.7	3666.0
57.5°	3625.0	3673.8	3781.5	3829.9	3942.1	4083.2	4339.3	4374.0	4161.3	4395.4	3895.6
60°	2941.2	3048.5	3400.8	3864.0	4396.4	4747.8	4877.0	4906.5	4576.6	4611.2	4205.5
62.5°	2087.8	2197.2	2644.1	3427.8	4403.1	5620.8	5677.9	5561.6	5034.0	4931.3	4740.0
65°	1108.1	1192.7	1557.8	2474.3	3817.6	5823.6	7078.7	6731.9	5840.8	5560.6	5430.6
67.5°	566.9	592.4	737.7	1211.0	2624.5	5172.7	8334.3	8578.5	7231.6	6185.1	5397.3
69°	501.6	516.7	613.0	875.4	1680.5	4381.3	8395.6	9212.5	7959.7	6133.0	4904.8
70°	485.6	498.9	586.5	792.4	1313.6	3674.2	8161.3	9156.8	8145.8	5935.0	4536.9
72.5°	412.2	423.6	522.2	700.2	1067.7	1823.8	6629.6	7759.3	7309.7	4944.0	3283.9
75°	275.7	313.1	501.2	656.4	993.2	1036.1	4370.8	5607.2	5208.8	3334.6	1710.6
77.5°	66.2	71.2	141.5	522.2	908.3	911.9	2247.9	3485.7	2843.1	1188.6	404.3
80°	35.7	34.3	39.7	103.6	845.7	855.8	1012.0	1692.0	1015.1	197.2	133.2
82.5°	25.2	23.8	25.6	43.4	266.2	779.5	732.1	765.8	420.8	75.7	59.8
85°	9.1	8.7	14.1	39.2	83.5	448.1	752.2	631.7	340.9	34.7	43.8
87.5°	3.2	2.8	5.5	21.4	25.6	190.8	464.2	477.4	134.2	21.0	20.6
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°	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9	2100.9
2.5°	2082.2	2053.9	2001.9	1948.5	1899.1	1839.9	1810.1	1781.0	1768.7	1764.1	1742.7
5°	2022.0	1974.0	1863.6	1752.7	1650.4	1541.8	1470.2	1412.7	1378.9	1362.4	1336.4
7.5°	1944.9	1866.4	1698.8	1527.7	1368.4	1211.4	1095.0	1005.5	943.8	914.3	887.3
10°	1870.0	1765.5	1527.3	1294.0	1077.6	869.5	708.8	592.4	518.1	483.8	462.0
12.5°	1803.0	1667.4	1361.6	1066.3	794.6	551.0	387.5	294.9	248.7	232.7	225.0
15°	1743.1	1577.0	1205.0	849.9	538.1	314.9	211.8	180.3	173.0	173.0	172.0
17.5°	1686.5	1488.4	1053.8	646.7	337.7	192.6	161.1	157.0	157.0	158.8	158.8
20°	1632.2	1404.0	907.8	464.2	212.7	152.8	145.7	144.7	145.7	147.9	147.9
22.5°	1585.6	1327.3	771.4	318.5	158.0	137.8	134.2	132.8	133.2	134.6	135.6
25°	1550.9	1262.5	642.7	215.9	136.0	125.5	121.5	119.1	117.3	117.3	118.2
27.5°	1529.1	1207.8	518.1	157.0	122.3	114.1	107.6	104.1	99.9	97.7	98.5
30°	1513.0	1155.7	401.2	128.2	109.6	101.3	93.1	87.2	81.3	78.5	79.5
32.5°	1507.1	1113.7	299.9	113.2	98.1	89.0	78.9	71.2	64.8	62.5	63.0
35°	1523.1	1080.4	219.6	102.3	89.0	77.5	66.2	57.5	52.5	51.1	51.5
37.5°	1565.1	1062.5	164.3	93.1	80.8	68.0	55.3	47.0	43.8	43.8	44.2
40°	1644.5	1062.1	132.0	86.8	73.5	58.9	45.6	39.7	37.9	38.8	39.2
42.5°	1760.4	1086.3	115.0	80.8	67.2	50.2	37.9	33.7	33.3	34.3	34.7
45°	1918.8	1130.5	105.9	75.7	60.3	42.0	31.9	29.2	29.2	30.5	31.1
47.5°	2112.8	1195.3	98.1	70.8	53.3	35.1	27.4	25.6	26.0	27.4	27.8
50°	2346.5	1277.1	90.4	65.2	48.4	29.2	23.8	22.4	22.8	24.6	25.2
52.5°	2612.6	1387.1	84.0	60.3	42.0	24.2	20.0	19.2	20.0	22.0	22.4
55°	2840.8	1485.7	76.3	56.1	33.7	20.0	16.4	16.4	17.4	19.6	20.0
57.5°	3060.3	1588.8	69.4	48.4	26.5	16.0	13.7	14.1	15.5	17.8	18.2
60°	3382.6	1763.6	61.2	40.6	20.0	12.7	11.5	11.9	13.7	16.0	16.4
62.5°	3929.8	2029.7	52.9	33.7	15.5	10.1	9.1	10.1	12.3	15.1	15.5
65°	4423.7	2137.9	43.4	28.3	11.9	7.7	7.7	9.1	11.9	14.6	15.1
67.5°	4148.4	1799.6	33.7	22.4	9.1	5.9	6.4	8.7	11.5	14.6	15.1
69°	3668.8	1471.6	28.7	17.8	7.7	5.5	5.9	8.7	11.5	14.1	14.6
70°	3295.0	1242.5	25.6	15.1	6.9	5.5	5.9	8.2	11.5	14.1	14.6
72.5°	2206.9	670.9	20.6	10.9	6.4	5.0	5.0	8.2	10.9	13.7	14.1
75°	948.4	185.3	16.4	7.7	5.5	4.6	4.6	7.7	10.5	13.3	14.1
77.5°	173.4	47.0	13.3	6.9	5.5	4.6	4.1	7.3	10.1	12.7	13.3
80°	69.0	23.2	10.5	5.9	5.0	4.1	3.6	6.9	9.5	12.3	12.7
82.5°	41.6	13.3	8.7	5.5	5.0	3.6	3.2	5.9	9.1	11.9	12.3
85°	33.7	9.1	6.9	5.5	4.6	3.6	2.8	5.5	8.2	11.5	11.9
87.5°	16.4	6.4	6.4	5.0	4.6	3.6	2.8	5.0	7.7	10.9	11.5
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)