

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: P299821

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299821
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
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
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10545.3 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

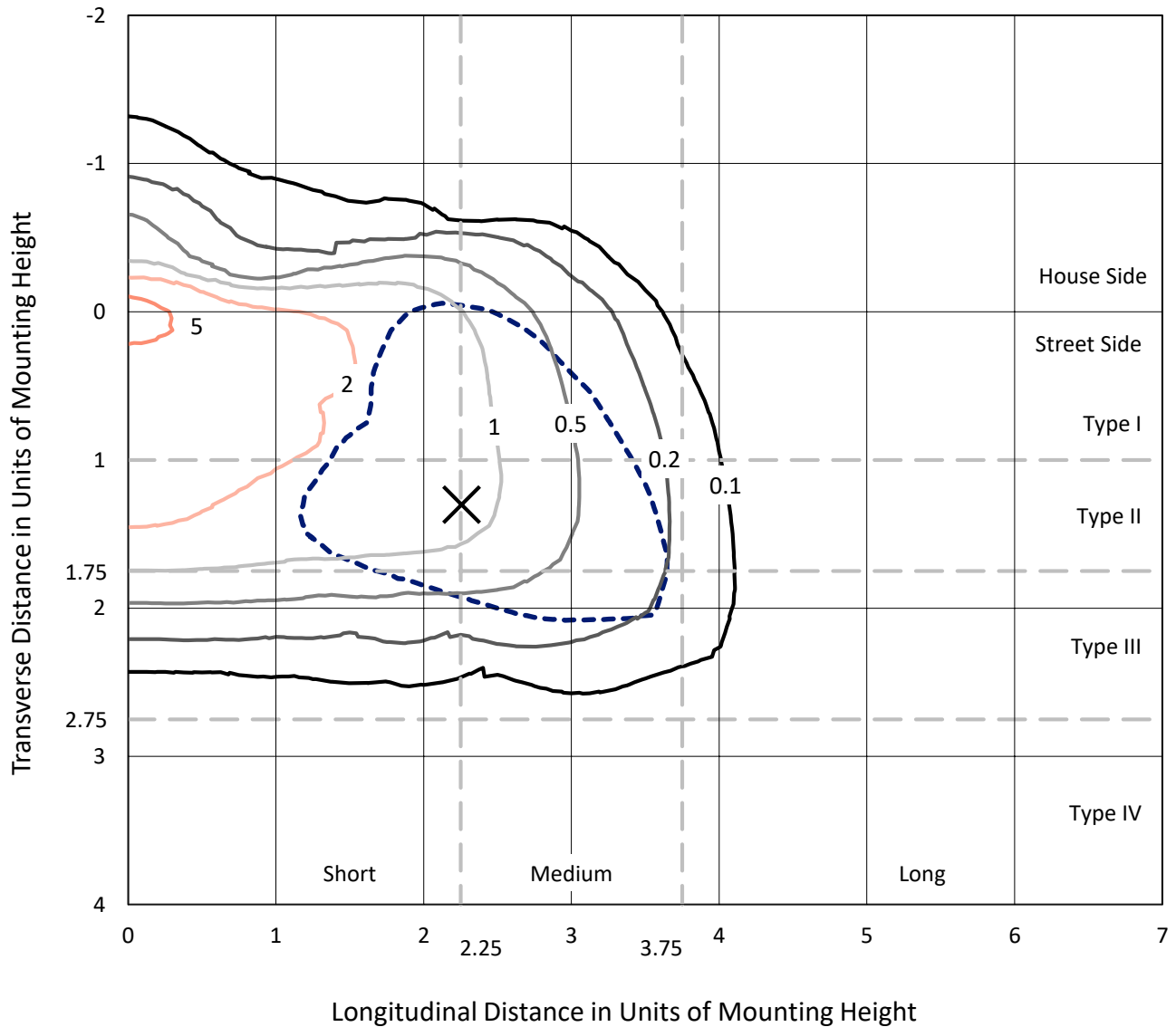
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

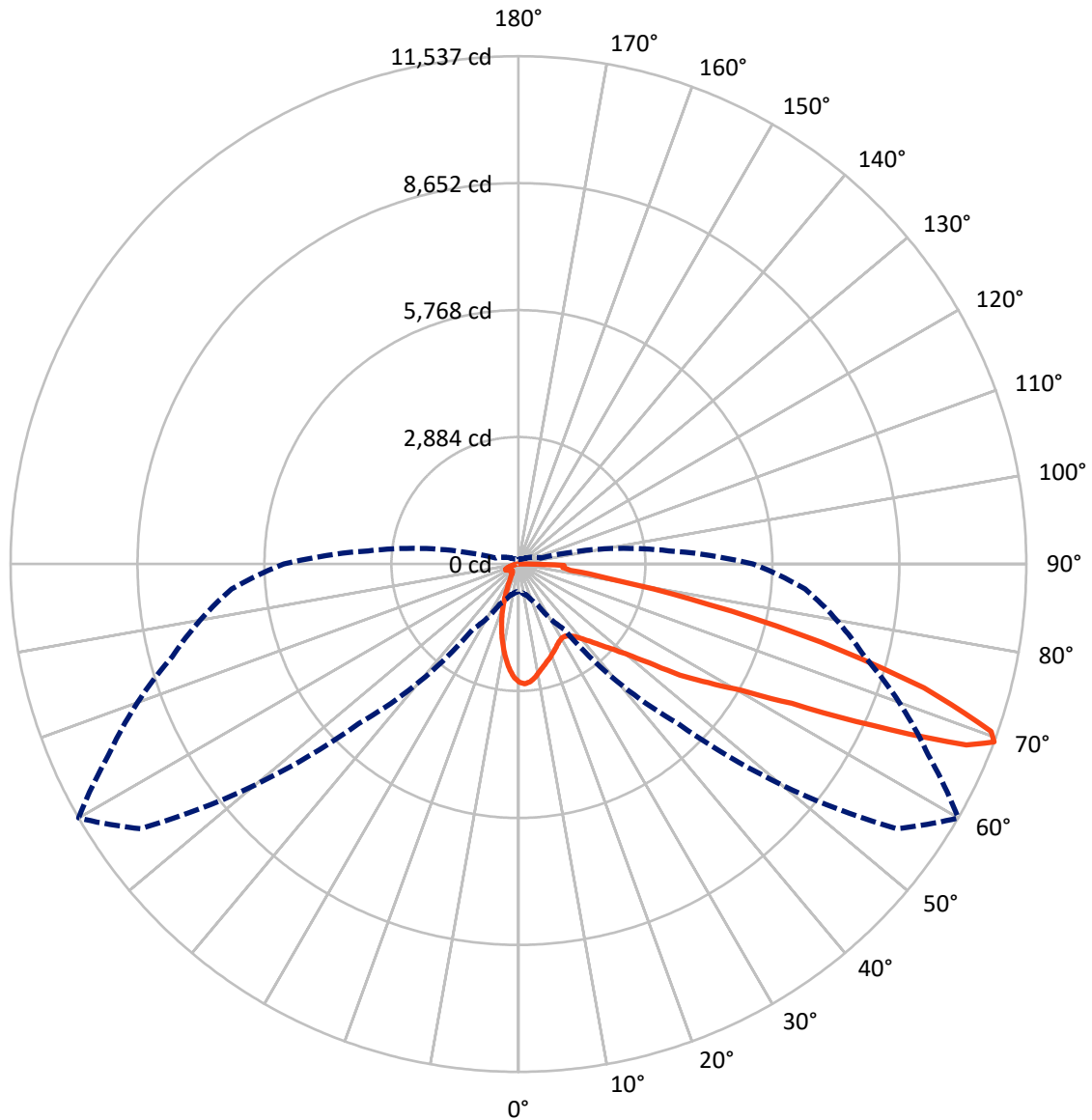
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.7 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1500.3	0.0	1500.3
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	9045.0	0.0	9045.0
	% Fixture	85.8	0.0	85.8
Total	Lumens	10545.3	0.0	10545.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.2	2.2
10°-20°	484.1	4.6
20°-30°	616.8	5.8
30°-40°	847.9	8.0
40°-50°	1375.9	13.0
50°-60°	2206.5	20.9
60°-70°	2936.7	27.8
70°-80°	1585.6	15.0
80°-90°	264.6	2.5
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°	10545.3	100.0
0°-180°	10545.3	100.0

Coefficient of Utilization



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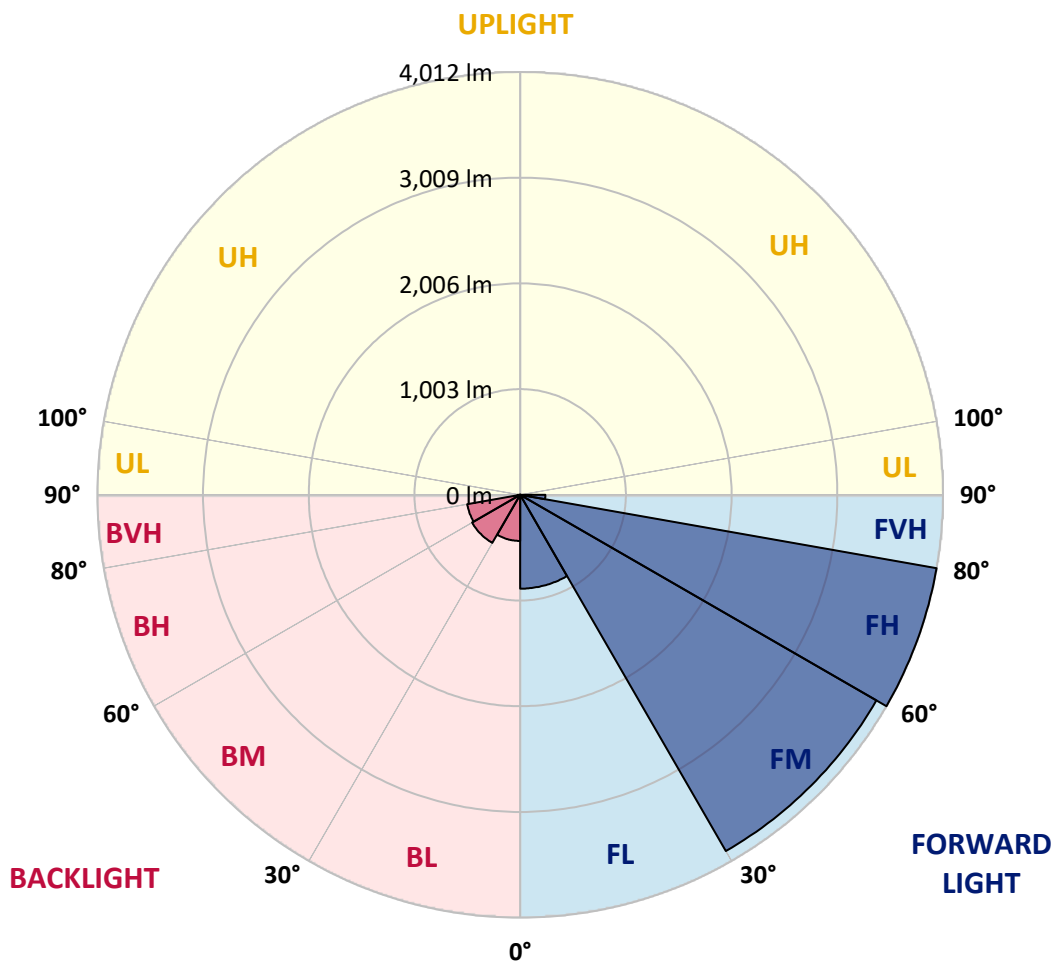
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	890.4	8.4			
FM	(30°-60°)	3903.3	37.0			
FH	(60°-80°)	4012.3	38.0			G2/5000
FVH	(80°-90°)	239.1	2.3			G3/500
BL	(0°-30°)	437.7	4.2	B1/500		
BM	(30°-60°)	527.1	5.0	B1/1000		
BH	(60°-80°)	510.0	4.8	B2/1000		G2/1000
BVH	(80°-90°)	25.5	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1
2.5°	2742.1	2748.2	2745.7	2744.2	2748.7	2741.6	2726.8	2722.3	2715.1	2698.3	2669.8
5°	2639.2	2657.6	2656.5	2670.3	2693.2	2699.3	2692.7	2693.7	2680.5	2659.6	2612.2
7.5°	2461.4	2469.1	2473.2	2503.2	2545.0	2578.6	2607.1	2616.3	2610.2	2592.4	2531.2
10°	2278.1	2284.2	2293.8	2329.0	2382.0	2428.3	2482.3	2513.4	2526.6	2523.6	2455.3
12.5°	2120.6	2126.8	2139.5	2179.2	2242.4	2299.4	2377.9	2416.6	2448.2	2467.0	2393.7
15°	1979.5	1992.8	2005.0	2050.9	2121.7	2196.5	2285.2	2334.1	2383.0	2425.3	2339.2
17.5°	1869.5	1882.8	1889.9	1931.7	2007.1	2098.7	2202.7	2260.2	2321.4	2390.6	2285.2
20°	1805.8	1811.9	1808.9	1832.3	1900.1	1997.4	2120.6	2187.4	2261.2	2358.0	2231.2
22.5°	1788.0	1788.5	1777.3	1774.8	1818.6	1900.6	2033.0	2114.0	2204.7	2336.6	2184.8
25°	1831.3	1829.8	1799.2	1774.3	1778.8	1826.7	1948.5	2042.7	2157.3	2332.1	2149.2
27.5°	1927.6	1932.2	1886.8	1840.0	1793.6	1792.1	1884.3	1983.6	2118.6	2352.9	2133.9
30°	2062.6	2070.2	2021.8	1962.2	1875.1	1803.3	1859.3	1948.5	2094.7	2396.2	2131.3
32.5°	2210.3	2218.5	2181.8	2119.1	2005.0	1872.6	1876.6	1951.5	2093.6	2456.9	2148.7
35°	2367.7	2376.9	2358.0	2305.1	2178.2	2000.4	1942.9	2000.9	2126.8	2549.6	2195.0
37.5°	2543.5	2557.7	2562.8	2512.4	2376.9	2169.0	2051.4	2094.7	2201.6	2678.4	2280.1
40°	2796.6	2816.5	2815.0	2742.6	2604.6	2396.7	2219.0	2230.2	2318.3	2850.6	2416.1
42.5°	3281.6	3285.7	3158.8	3001.4	2855.2	2636.2	2416.6	2407.4	2479.3	3068.6	2616.3
45°	3898.5	3881.7	3599.4	3295.3	3117.0	2911.2	2673.9	2629.0	2683.5	3334.6	2866.9
47.5°	4410.4	4371.7	4015.1	3595.4	3394.2	3210.3	2975.9	2897.5	2927.5	3636.1	3190.9
50°	4588.2	4559.2	4263.7	3845.0	3656.5	3575.0	3347.8	3236.8	3244.9	3995.8	3570.4
52.5°	4550.0	4545.9	4348.8	4009.5	3902.0	3958.1	3874.5	3724.3	3644.8	4395.1	3980.0
55°	4459.8	4468.5	4397.2	4201.1	4182.7	4327.9	4562.7	4451.7	4204.6	4798.1	4403.3
57.5°	4146.5	4169.0	4325.9	4442.0	4634.6	4850.5	5117.0	5085.4	4807.2	5233.6	4906.6
60°	3340.7	3392.6	3813.4	4395.1	5099.6	5775.1	5894.3	5821.0	5428.7	5774.1	5571.4
62.5°	2340.7	2394.7	2894.9	3805.2	5023.2	6819.4	7284.0	6967.6	6321.2	6570.3	6431.7
65°	1253.1	1279.1	1661.2	2640.2	4240.8	7034.9	9315.0	8833.6	7734.3	7551.9	7167.8
67.5°	691.3	705.5	851.7	1333.1	2716.1	6194.9	10608.8	10972.6	9500.4	8205.5	7033.8
69°	625.0	638.3	734.1	1009.6	1817.6	5122.1	10482.5	11536.5	10274.7	8140.8	6538.7
70°	611.3	623.5	709.6	930.7	1471.2	4221.9	10059.2	11392.3	10459.1	7909.0	6106.7
72.5°	550.2	563.4	646.9	835.9	1257.2	2104.9	7968.1	9632.3	9495.8	6857.6	4632.0
75°	513.0	525.2	666.8	818.6	1203.7	1332.1	5253.0	7099.1	6980.4	4797.1	2497.6
77.5°	219.6	218.5	309.2	692.8	1221.6	1289.8	2822.6	4434.9	4046.2	2050.4	717.2
80°	146.7	144.2	146.7	203.8	1120.2	1296.9	1478.8	2251.1	1700.4	522.6	353.5
82.5°	126.3	124.3	128.9	124.3	393.8	1480.3	1257.2	1197.1	808.4	297.0	175.2
85°	85.1	81.5	111.1	111.6	185.9	1315.3	1416.1	1011.2	654.1	176.3	86.6
87.5°	40.8	39.7	64.7	79.0	109.0	534.4	1588.8	1036.1	659.7	90.2	41.3
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°	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1	2687.1
2.5°	2661.1	2640.2	2619.9	2595.4	2569.9	2541.4	2527.2	2512.9	2509.3	2505.2	2491.0
5°	2587.8	2558.2	2507.3	2451.3	2392.2	2334.6	2290.8	2263.3	2242.4	2231.7	2212.9
7.5°	2493.0	2449.7	2360.6	2263.8	2164.5	2073.8	1995.3	1945.9	1899.1	1877.2	1852.2
10°	2402.9	2338.2	2199.6	2057.0	1914.3	1777.3	1648.4	1557.2	1476.3	1430.9	1398.8
12.5°	2325.4	2236.8	2044.7	1851.7	1656.1	1461.0	1267.9	1116.1	989.3	922.5	888.4
15°	2250.0	2143.1	1897.5	1652.5	1401.4	1136.0	882.3	710.1	605.2	563.4	549.1
17.5°	2181.8	2044.7	1749.8	1451.8	1138.5	817.6	592.9	498.2	458.0	444.2	439.6
20°	2107.9	1945.4	1596.5	1241.9	864.5	571.6	463.0	421.3	405.0	400.9	398.9
22.5°	2036.6	1847.6	1449.8	1017.3	621.0	441.1	397.8	380.5	378.0	381.5	381.5
25°	1976.0	1760.0	1291.3	782.4	455.9	371.4	356.1	352.0	361.7	374.9	377.5
27.5°	1930.6	1688.2	1122.7	577.7	363.2	323.0	322.5	329.1	353.0	378.5	383.6
30°	1899.6	1619.9	942.4	416.7	304.6	284.2	292.4	306.7	341.8	378.0	387.7
32.5°	1883.8	1569.5	754.4	322.5	260.8	249.6	263.4	280.7	315.3	348.9	361.7
35°	1896.0	1532.3	577.2	269.0	230.3	221.6	235.9	252.7	273.0	287.3	297.0
37.5°	1941.8	1517.5	435.5	240.9	209.4	201.2	212.4	222.1	230.3	234.3	238.9
40°	2040.7	1533.3	348.9	226.7	197.6	187.5	192.0	195.6	200.7	204.8	206.8
42.5°	2186.4	1580.7	312.8	221.1	191.5	176.8	175.7	177.3	183.9	191.5	193.1
45°	2390.1	1664.2	310.2	224.6	188.5	168.1	163.5	165.6	175.7	187.5	189.5
47.5°	2650.4	1791.6	330.6	235.3	191.0	163.5	155.9	158.4	171.2	187.0	189.5
50°	2965.7	1969.4	364.7	251.1	202.2	164.5	153.3	154.9	168.1	185.4	188.0
52.5°	3338.1	2221.5	401.9	266.4	213.9	171.2	155.4	151.8	164.0	179.3	182.4
55°	3752.3	2545.0	440.1	280.2	220.1	179.3	159.4	147.7	156.4	169.1	171.7
57.5°	4260.7	2997.3	506.3	293.4	224.1	184.9	163.5	143.7	146.7	155.9	157.9
60°	4948.9	3637.1	623.0	315.3	233.3	187.0	163.0	140.1	137.0	142.1	143.1
62.5°	5773.6	4332.0	720.3	342.8	248.6	188.5	160.0	137.5	128.9	128.9	129.9
65°	6263.1	4517.9	666.3	365.8	261.3	187.0	156.4	135.0	122.8	117.2	117.7
67.5°	5848.0	3973.4	571.0	370.3	260.8	179.8	150.8	130.4	116.7	108.0	107.5
69°	5327.9	3428.3	528.3	358.1	248.6	170.7	143.7	125.3	112.1	102.9	102.4
70°	4908.6	3095.6	500.2	344.9	235.3	164.0	138.0	120.7	108.5	99.8	98.8
72.5°	3568.9	2028.4	427.4	296.5	194.1	137.5	119.2	106.0	96.8	91.7	90.7
75°	1783.4	967.4	346.9	240.4	148.7	110.0	97.8	88.6	84.1	83.0	82.5
77.5°	585.8	443.2	248.1	179.3	110.5	86.1	79.0	72.3	71.3	74.4	73.4
80°	321.9	257.8	157.4	118.7	75.4	63.2	62.1	58.6	60.1	65.2	64.2
82.5°	164.0	134.0	97.3	71.3	50.9	45.3	49.4	47.4	49.4	54.0	53.5
85°	81.0	73.4	61.6	43.3	33.6	29.0	35.1	36.7	37.7	41.3	41.3
87.5°	46.9	43.3	32.6	20.4	16.8	15.3	20.4	19.9	23.4	25.5	25.0
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)