

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: P300421

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
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-AFL-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7126.7 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

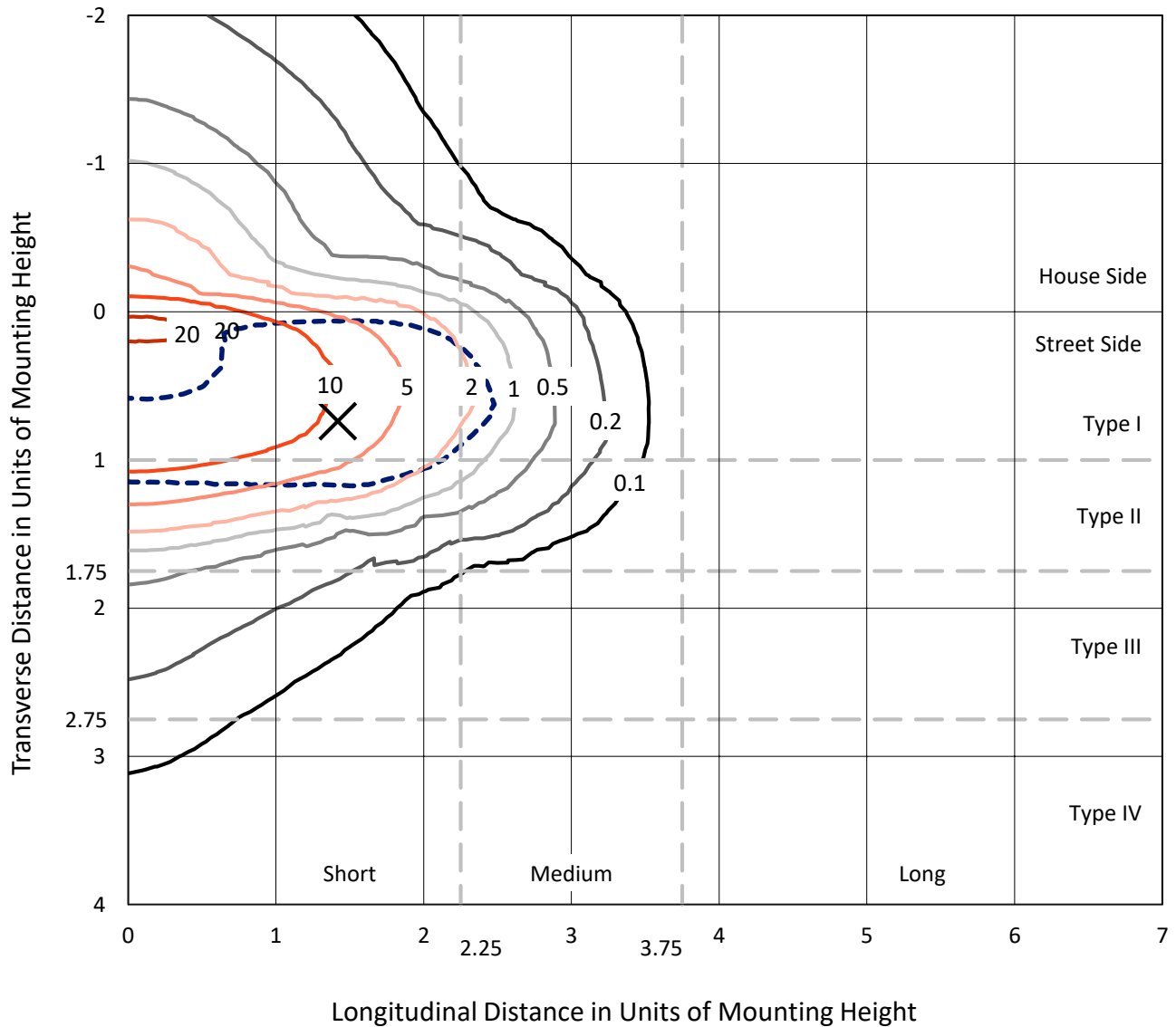
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

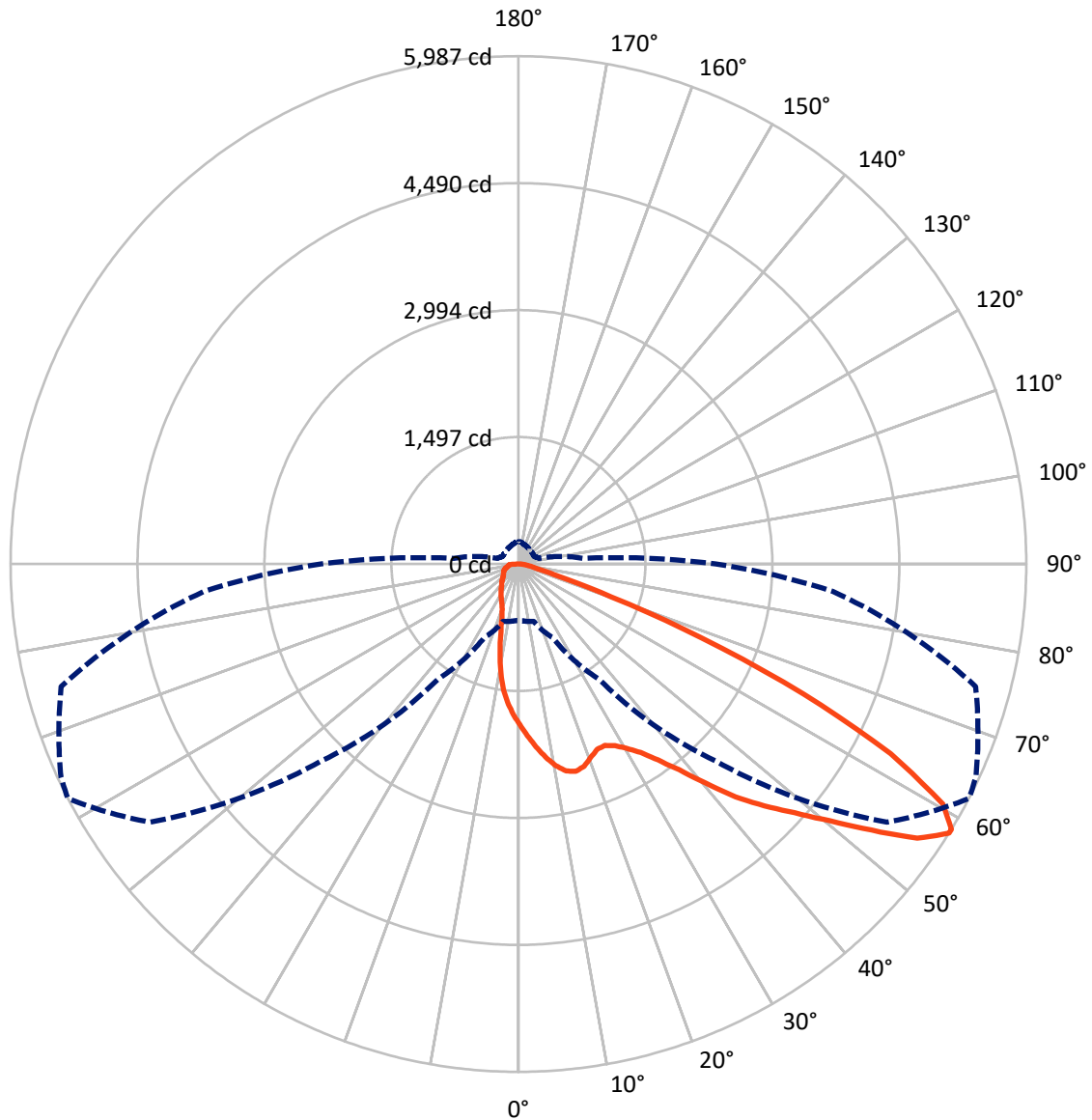
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 23.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1086.8	0.0	1086.8
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	6039.8	0.0	6039.8
	% Fixture	84.7	0.0	84.7
Total	Lumens	7126.7	0.0	7126.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.3	2.4
10°-20°	432.8	6.1
20°-30°	699.6	9.8
30°-40°	1110.6	15.6
40°-50°	1625.0	22.8
50°-60°	1699.6	23.8
60°-70°	1004.2	14.1
70°-80°	282.9	4.0
80°-90°	102.7	1.4
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°	7126.7	100.0
0°-180°	7126.7	100.0

Coefficient of Utilization



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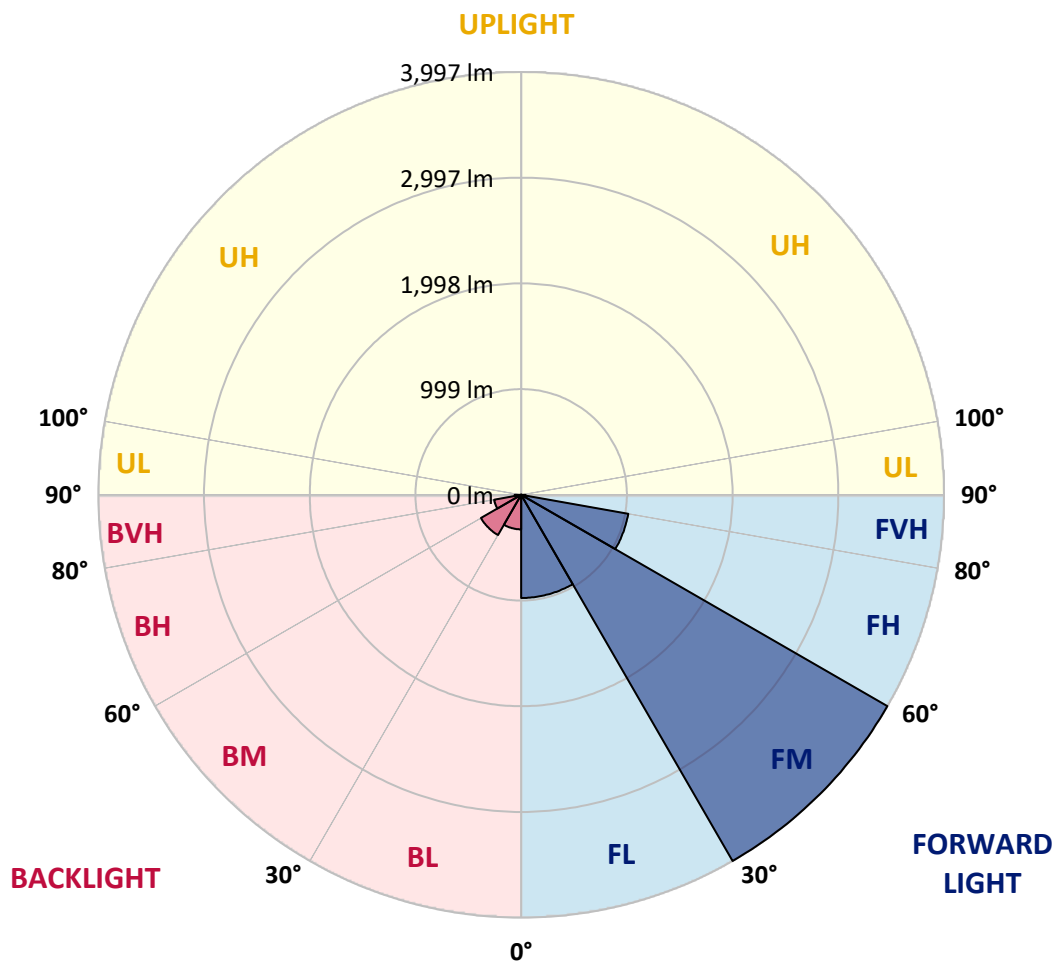
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	975.0	13.7			
FM	(30°-60°)	3996.6	56.1			
FH	(60°-80°)	1027.7	14.4			G1/1800
FVH	(80°-90°)	40.5	0.6			G1/100
BL	(0°-30°)	326.7	4.6	B1/500		
BM	(30°-60°)	438.7	6.2	B1/1000		
BH	(60°-80°)	259.3	3.6	B1/500		G1/500
BVH	(80°-90°)	62.2	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0
2.5°	2163.2	2145.7	2134.7	2124.9	2112.2	2085.0	2048.4	2025.3	2013.5	1973.6	1926.3
5°	2375.3	2359.9	2348.4	2335.4	2312.5	2269.9	2210.9	2163.9	2140.7	2060.8	1966.2
7.5°	2325.6	2332.0	2351.8	2386.4	2415.9	2410.2	2357.5	2297.8	2267.2	2156.2	2012.5
10°	2026.3	2037.4	2071.6	2152.5	2283.3	2417.6	2458.5	2417.2	2386.4	2250.5	2060.2
12.5°	1966.2	1965.9	1968.6	1990.0	2067.9	2256.8	2461.9	2503.5	2485.0	2340.4	2108.8
15°	1990.7	1991.4	1989.4	1998.4	2022.6	2097.4	2359.2	2536.7	2549.8	2431.0	2159.2
17.5°	2055.1	2053.5	2045.7	2045.7	2054.5	2083.7	2238.4	2505.8	2566.2	2511.2	2203.5
20°	2163.2	2155.5	2135.0	2116.2	2106.8	2122.6	2188.7	2434.7	2537.7	2581.3	2240.0
22.5°	2294.1	2288.0	2254.8	2214.5	2182.0	2181.7	2214.2	2372.6	2488.4	2647.5	2270.9
25°	2463.2	2453.5	2404.1	2339.7	2282.7	2260.9	2269.9	2369.6	2461.5	2719.3	2298.4
27.5°	2661.9	2644.1	2585.7	2492.7	2408.8	2364.9	2351.8	2424.3	2486.0	2808.2	2336.7
30°	2902.8	2882.4	2807.5	2686.4	2567.9	2495.8	2467.9	2521.3	2567.2	2916.6	2398.1
32.5°	3177.0	3147.5	3060.9	2927.3	2771.6	2661.5	2616.2	2649.5	2686.0	3047.1	2475.0
35°	3555.9	3520.6	3395.5	3211.2	3035.4	2884.0	2811.6	2835.7	2871.3	3241.8	2586.0
37.5°	3814.3	3798.5	3715.3	3542.1	3350.8	3176.7	3064.6	3078.7	3098.8	3485.1	2728.3
40°	3811.9	3818.3	3820.0	3821.7	3691.5	3524.7	3404.2	3389.4	3385.4	3752.2	2890.1
42.5°	3621.0	3647.2	3731.7	3903.2	3982.4	3905.9	3795.5	3752.9	3731.7	4067.0	3061.6
45°	3328.7	3342.8	3501.2	3836.1	4131.4	4283.4	4199.9	4065.6	4027.4	4356.3	3203.9
47.5°	3178.0	3193.5	3293.1	3658.2	4129.7	4588.5	4636.8	4381.1	4312.6	4608.0	3326.7
50°	2819.3	2851.5	2977.0	3348.8	3979.1	4728.8	5093.5	4757.0	4615.3	4852.9	3449.8
52.5°	2160.5	2210.2	2350.8	2840.1	3596.8	4659.3	5459.0	5212.7	5012.7	5106.6	3555.6
55°	1362.8	1399.7	1517.9	2005.8	2877.3	4297.9	5597.6	5705.7	5527.8	5346.9	3647.2
57.5°	741.0	757.4	801.7	1107.4	1871.6	3498.8	5395.6	5986.2	5912.4	5551.0	3716.3
58°	663.1	674.2	701.7	959.8	1659.8	3280.4	5306.0	5987.2	5950.3	5580.8	3721.7
60°	492.0	486.3	461.8	547.7	923.9	2266.2	4764.3	5747.6	5856.0	5617.4	3695.5
62.5°	432.2	418.5	368.5	362.8	449.4	1044.0	3645.5	4923.4	5179.5	5408.7	3536.4
65°	406.1	391.3	326.9	306.1	324.2	441.6	2147.4	3692.5	4013.6	4775.7	3129.7
67.5°	386.6	367.5	300.4	271.8	273.2	292.0	860.8	2325.6	2687.0	3626.0	2434.4
70°	367.8	347.0	277.9	245.0	237.3	230.9	342.3	1164.2	1492.0	2290.4	1552.1
72.5°	347.7	327.2	258.1	223.8	208.7	187.6	223.5	476.2	665.1	1083.6	704.1
75°	318.5	300.0	238.3	205.0	183.6	155.4	168.8	248.7	298.3	431.6	339.3
77.5°	282.6	267.5	216.1	189.6	162.8	126.2	129.9	172.5	191.3	247.0	201.7
80°	203.0	208.4	192.3	170.5	145.0	102.4	99.7	125.8	135.9	158.7	131.2
82.5°	142.6	145.6	159.1	139.3	119.8	80.5	73.5	88.6	94.6	104.4	70.8
85°	98.3	95.0	109.1	97.0	86.6	53.7	50.3	60.1	63.8	64.8	36.6
87.5°	59.1	59.1	63.1	52.0	46.6	27.9	27.2	34.2	36.6	34.9	20.1
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°	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0	1893.0
2.5°	1898.1	1874.3	1823.6	1783.0	1731.6	1678.3	1648.4	1616.5	1594.7	1578.9	1604.1
5°	1912.5	1863.9	1759.2	1659.8	1550.1	1436.0	1349.4	1268.9	1212.8	1177.9	1210.8
7.5°	1935.3	1860.5	1693.7	1523.9	1326.9	1137.0	967.2	860.8	798.7	768.2	787.3
10°	1961.5	1855.1	1616.9	1339.7	1057.8	818.5	691.6	648.7	634.6	628.9	631.6
12.5°	1983.3	1843.7	1522.6	1116.8	794.3	646.3	609.8	608.8	611.8	612.4	613.5
15°	1998.8	1826.9	1382.6	884.6	635.3	589.0	586.9	593.0	598.7	601.0	602.4
17.5°	2009.2	1792.4	1224.6	699.4	569.2	561.1	565.8	573.5	579.6	581.2	582.6
20°	2008.2	1741.7	1036.3	583.3	533.2	533.2	541.3	547.3	547.7	545.7	546.7
22.5°	1997.8	1672.2	853.7	521.5	501.4	507.1	515.1	509.4	485.9	470.5	471.5
25°	1980.3	1589.3	697.4	482.2	471.8	481.9	479.6	436.6	403.0	387.9	387.9
27.5°	1964.9	1491.4	577.2	448.0	442.3	454.7	413.1	374.2	360.1	353.0	350.7
30°	1953.8	1385.6	497.0	415.1	414.5	405.4	358.4	347.7	345.3	339.6	337.6
32.5°	1956.5	1278.6	445.7	386.3	388.6	347.0	332.2	334.6	332.6	326.5	323.8
35°	1978.6	1176.9	412.1	360.1	353.0	313.4	316.8	321.2	320.5	312.1	309.4
37.5°	2018.2	1080.6	390.0	338.3	308.1	296.7	302.0	308.7	307.1	301.4	299.3
40°	2059.8	990.0	371.8	321.2	281.6	285.2	289.9	293.6	295.3	297.0	295.7
42.5°	2100.4	895.3	349.7	303.7	270.5	274.5	276.5	280.2	289.3	295.7	295.3
45°	2124.6	806.4	326.9	278.9	261.8	264.1	262.8	270.1	281.2	291.6	292.0
47.5°	2151.5	737.3	308.7	256.1	253.4	255.0	251.0	258.4	268.5	281.2	282.6
50°	2184.0	696.0	294.3	237.9	242.0	242.0	241.0	247.7	261.8	276.5	279.2
52.5°	2220.9	688.0	282.2	224.8	230.5	230.2	231.2	241.3	256.7	271.2	273.5
55°	2265.9	709.8	269.1	215.1	219.5	220.8	224.2	235.6	248.7	265.1	266.1
57.5°	2318.2	754.1	258.7	207.4	209.4	213.8	219.1	229.5	243.6	261.8	262.8
58°	2327.0	763.5	257.1	206.7	207.4	212.4	218.5	228.5	242.6	262.4	263.4
60°	2327.3	794.7	253.4	203.7	199.7	208.1	214.8	224.8	241.0	264.8	267.1
62.5°	2244.7	794.3	250.7	199.3	191.6	202.0	209.7	221.5	239.3	270.5	275.2
65°	1976.6	721.8	237.9	192.6	185.2	196.7	205.4	219.1	244.0	295.3	298.3
67.5°	1546.1	591.6	214.1	183.2	176.9	191.3	202.7	218.8	249.0	301.0	303.0
70°	1022.2	442.6	187.9	172.5	168.1	184.9	204.0	230.2	243.3	288.9	283.6
72.5°	530.6	310.8	166.8	159.1	158.1	179.2	223.5	228.9	237.6	271.8	265.1
75°	278.5	215.8	148.3	144.3	146.0	177.9	263.8	222.8	230.2	260.1	272.8
77.5°	170.5	174.2	132.6	130.9	134.2	173.8	263.4	215.1	219.5	239.3	253.4
80°	114.1	141.3	120.5	120.8	123.2	159.1	236.6	203.0	206.4	226.2	240.6
82.5°	72.2	83.6	109.4	115.1	112.1	131.2	201.0	184.9	189.6	258.7	273.5
85°	36.6	52.4	95.0	110.7	101.0	92.0	163.1	162.1	164.4	186.6	195.0
87.5°	16.8	28.9	74.2	96.6	76.2	57.4	118.5	120.1	129.5	132.6	132.6
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)