

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: P299231

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299231
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
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-SL2-7050-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11686.9 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

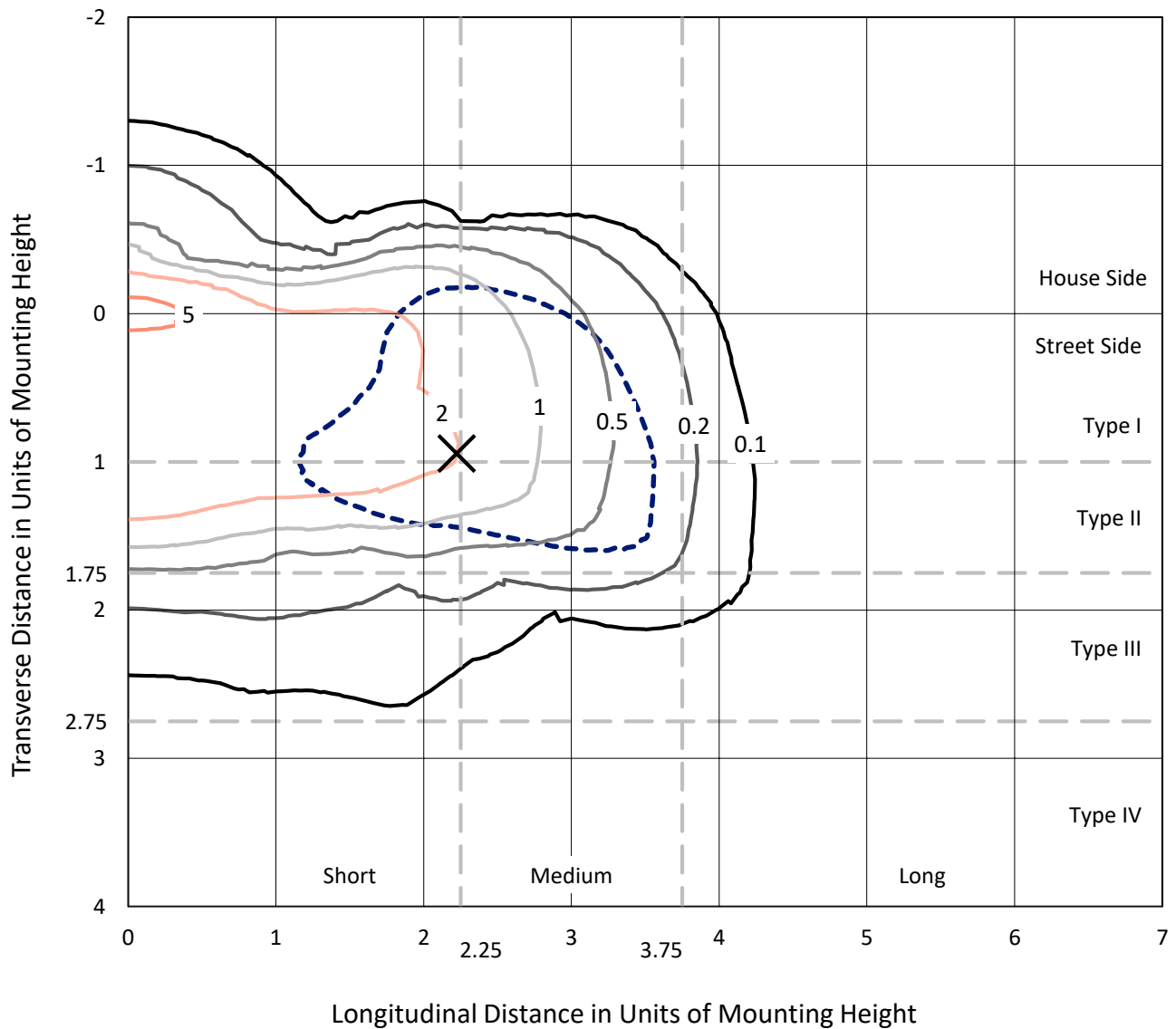
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

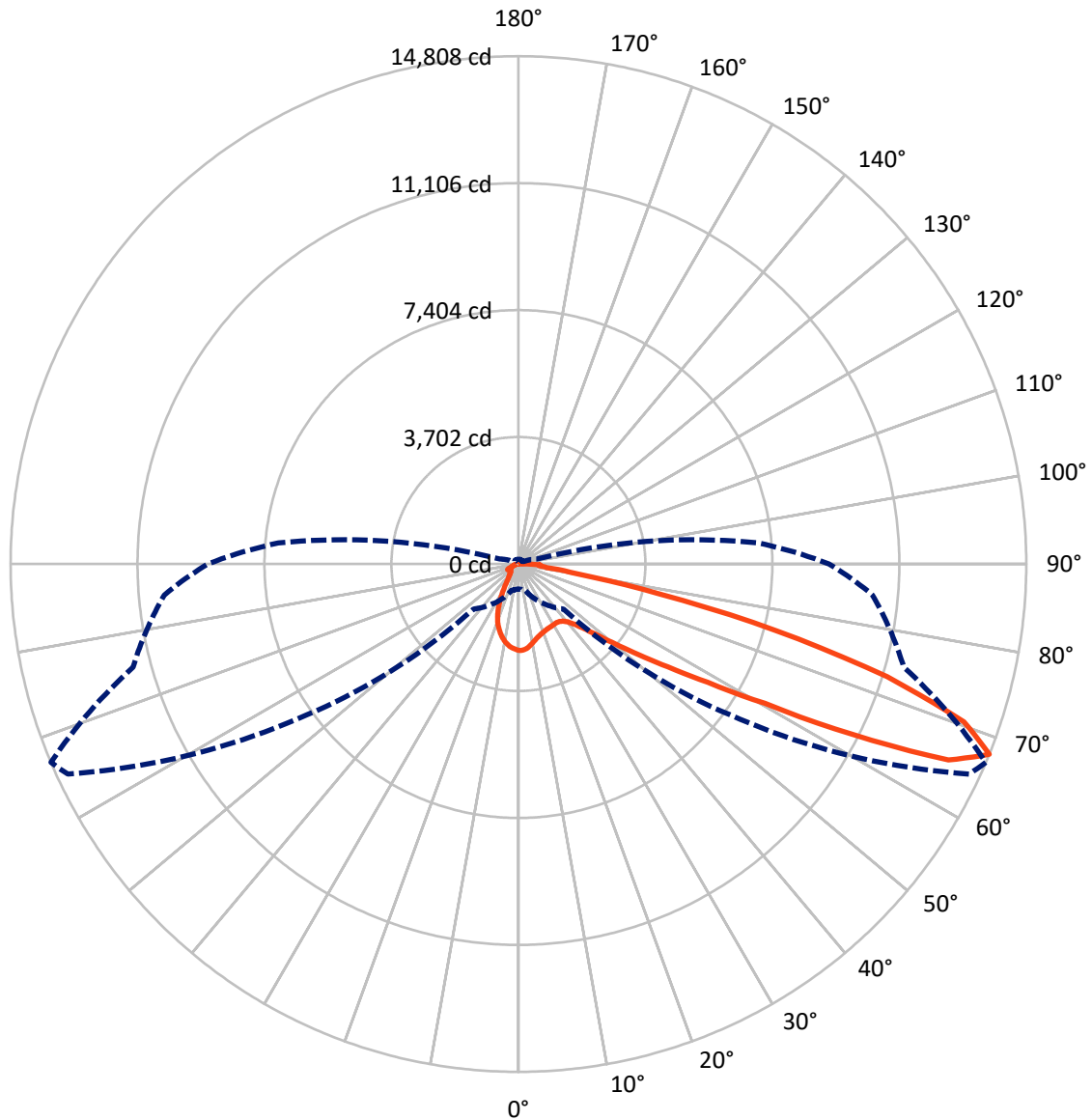
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1936.4	0.0	1936.4
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	9750.5	0.0	9750.5
	% Fixture	83.4	0.0	83.4
Total	Lumens	11686.9	0.0	11686.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.1	1.8
10°-20°	497.6	4.3
20°-30°	674.5	5.8
30°-40°	958.9	8.2
40°-50°	1604.3	13.7
50°-60°	2538.0	21.7
60°-70°	3233.2	27.7
70°-80°	1693.5	14.5
80°-90°	271.6	2.3
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°	11686.9	100.0
0°-180°	11686.9	100.0



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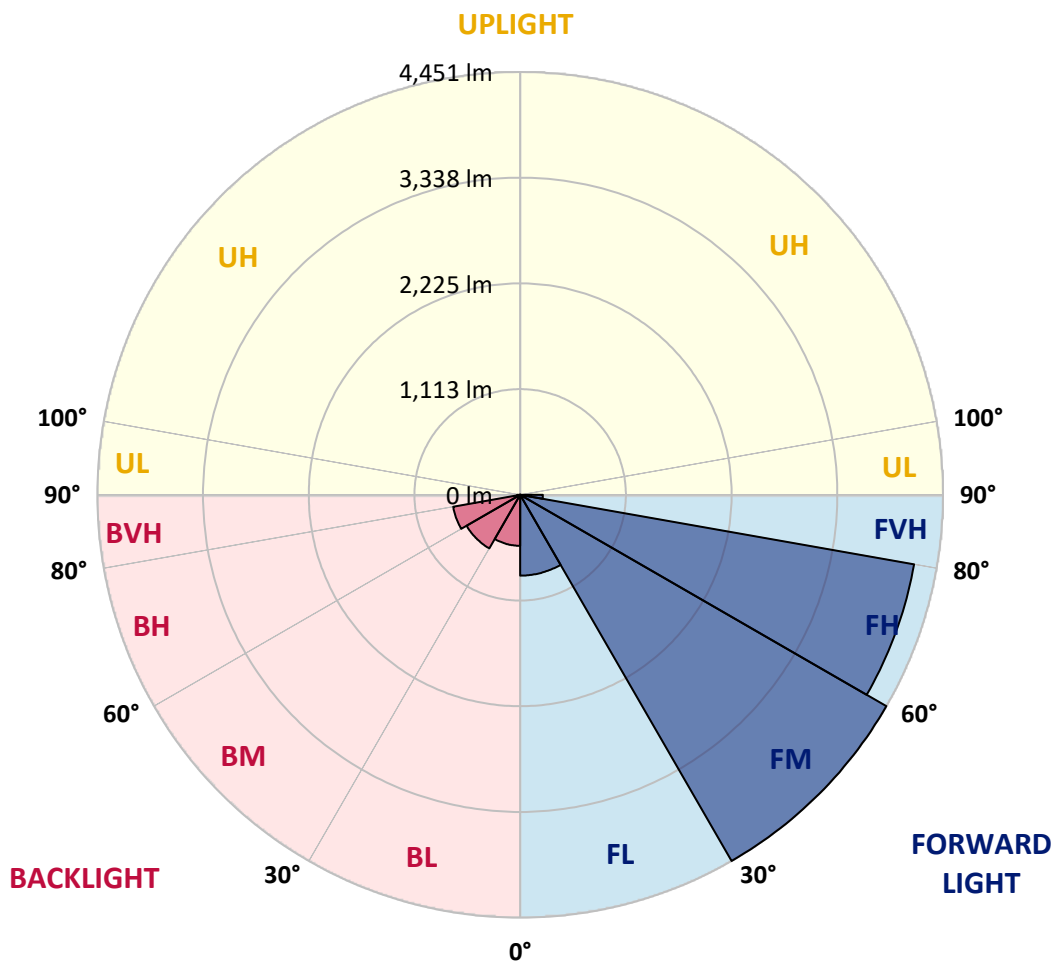
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	850.5	7.3			
FM (30°-60°)	4450.6	38.1			
FH (60°-80°)	4210.5	36.0			G2/5000
FVH (80°-90°)	238.8	2.0			G3/500
BL (0°-30°)	536.7	4.6	B2/1000		
BM (30°-60°)	650.7	5.6	B1/1000		
BH (60°-80°)	716.2	6.1	B2/1000		G2/1000
BVH (80°-90°)	32.8	0.3			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8
2.5°	2417.1	2421.1	2433.8	2441.9	2478.2	2493.7	2504.7	2515.6	2517.4	2522.6	2517.4
5°	2163.5	2172.2	2195.8	2222.3	2292.6	2347.9	2406.1	2466.7	2477.6	2516.8	2527.7
7.5°	1967.0	1964.7	1984.3	2016.0	2088.0	2164.7	2266.7	2387.1	2410.8	2498.9	2541.6
10°	1823.5	1821.8	1842.5	1875.4	1943.9	2016.5	2131.8	2296.6	2330.1	2470.7	2554.8
12.5°	1717.4	1718.0	1738.8	1775.1	1844.8	1918.0	2035.0	2209.0	2251.7	2437.8	2568.7
15°	1647.1	1651.7	1668.5	1707.1	1775.1	1848.3	1963.0	2143.3	2191.2	2411.9	2584.2
17.5°	1623.5	1631.0	1636.8	1665.0	1723.2	1796.4	1908.8	2094.9	2145.6	2394.0	2598.1
20°	1645.4	1654.0	1643.1	1652.9	1689.8	1754.3	1866.1	2056.9	2108.8	2373.9	2599.8
22.5°	1739.3	1747.4	1715.1	1686.9	1684.6	1723.8	1831.0	2026.9	2080.5	2358.9	2600.4
25°	1904.7	1909.9	1855.8	1790.1	1726.1	1712.8	1806.2	2006.2	2063.2	2345.6	2589.4
27.5°	2107.6	2111.6	2049.4	1952.6	1824.1	1738.8	1797.5	1994.1	2053.4	2334.1	2571.0
30°	2354.3	2373.3	2289.7	2167.5	1980.2	1815.4	1814.8	1987.7	2042.5	2314.5	2534.7
32.5°	2606.7	2614.8	2557.1	2433.2	2190.6	1950.3	1863.2	1992.3	2039.6	2290.9	2488.6
35°	2862.6	2873.0	2835.5	2735.8	2478.2	2148.0	1957.8	2019.4	2057.5	2282.8	2456.3
37.5°	3194.0	3207.8	3155.9	3040.7	2828.0	2415.9	2115.1	2087.4	2112.2	2305.9	2446.5
40°	3717.9	3711.5	3559.9	3388.2	3210.7	2758.9	2339.9	2202.7	2217.1	2380.2	2476.5
42.5°	4327.6	4312.0	4051.0	3781.2	3631.4	3173.8	2637.2	2402.7	2399.8	2526.6	2581.9
45°	4814.0	4801.3	4566.2	4233.7	4113.8	3646.4	3021.7	2700.6	2679.3	2758.9	2776.7
47.5°	5077.4	5078.0	4942.5	4671.1	4668.2	4246.9	3515.6	3131.7	3094.8	3132.3	3113.3
50°	4985.2	4997.3	4982.9	4896.4	5174.2	5034.2	4160.5	3732.8	3658.5	3695.4	3622.2
52.5°	4539.1	4554.7	4640.0	4772.5	5386.9	5985.7	5107.9	4479.7	4393.3	4380.0	4298.8
55°	3748.4	3767.4	3941.5	4301.7	5209.9	6624.8	6602.9	5431.8	5294.1	5169.0	5134.4
57.5°	2583.6	2615.3	2895.4	3430.3	4637.7	6817.9	8383.2	6789.1	6509.0	6072.1	6080.2
60°	1456.4	1493.2	1823.5	2309.3	3482.7	6608.1	9737.5	8844.8	8253.5	7129.7	7189.6
62.5°	926.1	965.9	1216.6	1604.5	2089.7	5478.5	10292.5	11702.8	10951.8	8433.3	8492.1
65°	749.8	767.1	885.2	1324.4	1517.5	3300.6	9871.2	14057.1	13777.0	10087.9	9813.6
67.5°	731.9	737.7	798.8	1111.7	1455.2	1855.2	7873.7	14497.4	14808.0	11633.1	10364.0
70°	723.3	743.5	900.2	1061.0	1393.5	1564.7	4731.6	13290.6	13781.0	12037.1	9631.5
72.5°	351.0	349.8	453.0	959.6	1569.9	1622.9	2430.9	10753.6	11245.8	10428.5	7914.6
75°	283.0	258.8	247.2	351.6	1509.4	1675.9	1549.2	7399.4	7755.6	6991.9	4865.3
77.5°	268.6	239.7	219.6	220.2	638.0	1777.4	1312.3	4095.3	4199.1	3158.2	1333.0
80°	222.5	195.9	181.5	204.6	308.9	1692.7	1418.9	1853.5	1700.7	775.7	443.8
82.5°	154.5	140.6	136.6	171.7	247.2	1206.2	1650.0	995.9	835.1	388.4	273.8
85°	98.6	84.1	93.4	125.1	192.5	556.7	1699.6	776.3	617.2	246.7	154.5
87.5°	45.5	36.9	46.1	69.2	125.6	191.9	1617.2	872.0	635.7	130.2	97.4
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°	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8	2520.8
2.5°	2522.0	2511.0	2502.4	2486.3	2468.4	2451.1	2435.5	2415.9	2410.2	2405.0	2413.1
5°	2530.1	2519.1	2487.4	2437.8	2383.1	2331.8	2280.5	2236.7	2209.6	2194.6	2203.3
7.5°	2542.2	2526.6	2460.9	2369.8	2271.3	2181.4	2088.6	2014.2	1959.5	1933.6	1941.1
10°	2553.1	2523.1	2415.9	2279.4	2135.3	2001.6	1855.2	1734.2	1644.2	1597.0	1608.5
12.5°	2557.7	2509.9	2353.1	2166.4	1968.7	1772.8	1557.2	1376.3	1247.2	1199.9	1190.1
15°	2562.3	2494.9	2284.0	2037.9	1767.6	1490.4	1188.4	971.7	864.5	840.9	835.7
17.5°	2563.5	2469.0	2205.6	1898.4	1531.9	1154.4	812.6	674.9	675.4	713.5	718.1
20°	2551.4	2430.3	2110.5	1724.9	1249.5	798.2	557.9	534.3	621.3	716.4	727.9
22.5°	2523.7	2379.1	2002.7	1522.6	926.1	525.6	431.7	457.6	570.0	686.4	699.7
25°	2488.6	2316.8	1875.4	1288.1	613.2	375.8	361.9	393.6	469.7	547.5	555.0
27.5°	2440.7	2243.0	1732.4	1019.5	398.2	309.5	318.7	340.0	371.2	405.7	409.2
30°	2379.1	2154.9	1579.7	743.5	300.8	278.4	291.6	303.1	316.4	336.0	337.7
32.5°	2308.2	2070.1	1422.9	513.5	266.8	262.2	272.6	278.4	288.7	300.8	302.0
35°	2248.8	1989.5	1260.4	363.1	252.4	250.1	257.0	259.3	269.1	282.4	283.6
37.5°	2214.8	1923.8	1092.7	292.8	242.6	239.2	243.2	243.2	257.0	276.6	279.5
40°	2217.1	1887.5	925.0	264.5	234.6	230.0	230.5	230.5	248.4	269.7	271.4
42.5°	2279.9	1896.7	776.3	253.6	228.2	223.0	220.2	221.9	236.9	250.7	251.9
45°	2427.5	1961.8	636.8	246.7	221.9	220.2	213.8	213.2	219.0	225.3	225.3
47.5°	2669.5	2090.3	542.3	242.1	216.7	216.1	208.6	201.1	200.6	202.9	202.9
50°	3063.1	2311.6	478.9	236.9	213.2	208.6	200.0	188.5	184.4	186.2	186.2
52.5°	3653.3	2706.4	454.7	230.0	205.7	198.3	188.5	176.9	173.5	174.0	174.0
55°	4427.3	3312.7	451.3	221.9	197.7	185.6	177.5	168.9	164.8	166.0	166.0
57.5°	5373.0	4151.2	512.9	209.2	186.7	172.9	168.3	162.5	159.6	161.4	160.8
60°	6522.8	5248.6	760.7	195.9	175.8	161.4	161.4	156.8	154.5	156.2	155.6
62.5°	7847.2	6509.0	1069.7	186.2	164.3	152.1	154.5	152.1	149.8	151.0	150.4
65°	9021.7	7330.2	1001.6	178.7	152.7	143.5	147.5	146.4	144.7	145.8	145.2
67.5°	9055.7	7025.9	562.5	170.6	141.8	134.9	140.6	140.0	138.9	140.0	139.5
70°	8081.8	5932.7	317.0	155.6	130.2	124.5	132.6	132.0	130.8	133.1	132.6
72.5°	6475.0	4305.1	231.7	137.2	118.7	113.5	122.8	122.2	122.2	125.6	123.9
75°	3725.9	2215.4	185.0	117.6	106.6	102.6	110.7	111.2	112.4	117.0	113.5
77.5°	1062.2	690.4	151.0	99.7	91.6	89.9	98.0	99.1	99.7	104.9	100.3
80°	394.8	318.1	124.5	83.6	74.9	75.5	83.0	84.7	85.3	90.5	84.7
82.5°	251.9	209.8	100.9	64.5	58.8	58.2	67.4	69.7	69.7	70.3	66.9
85°	147.0	125.6	76.1	46.7	41.5	39.8	50.1	54.2	52.4	51.3	49.0
87.5°	98.6	86.4	46.7	25.9	22.5	21.3	29.4	32.3	31.1	29.4	27.7
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)