

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: P299725

Luminaire Tested: **GLNA-AF-06-LED-E1-5MQ-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299725  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-06-LED-E1-5MQ-7027-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21333.1 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 193  
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

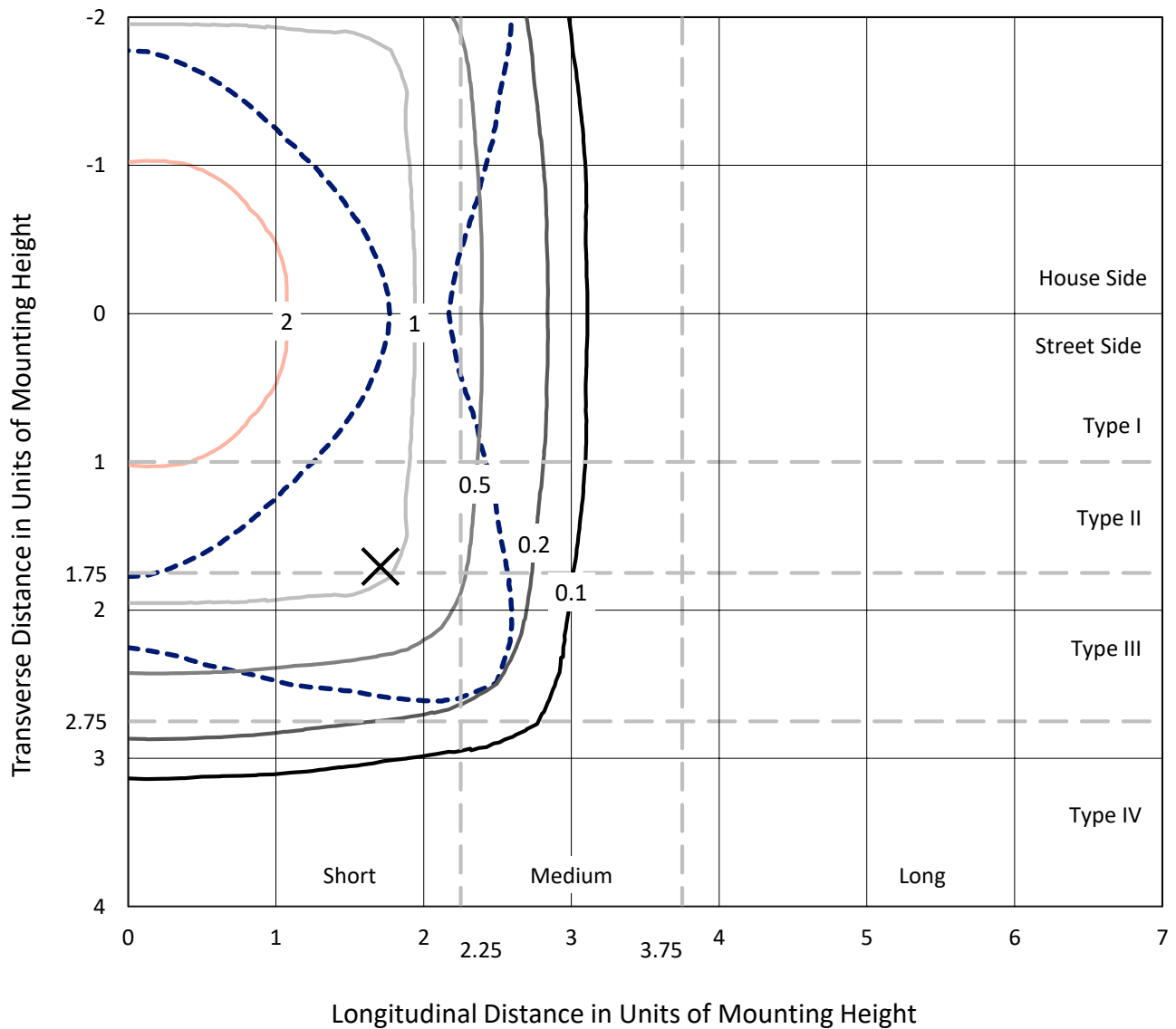


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

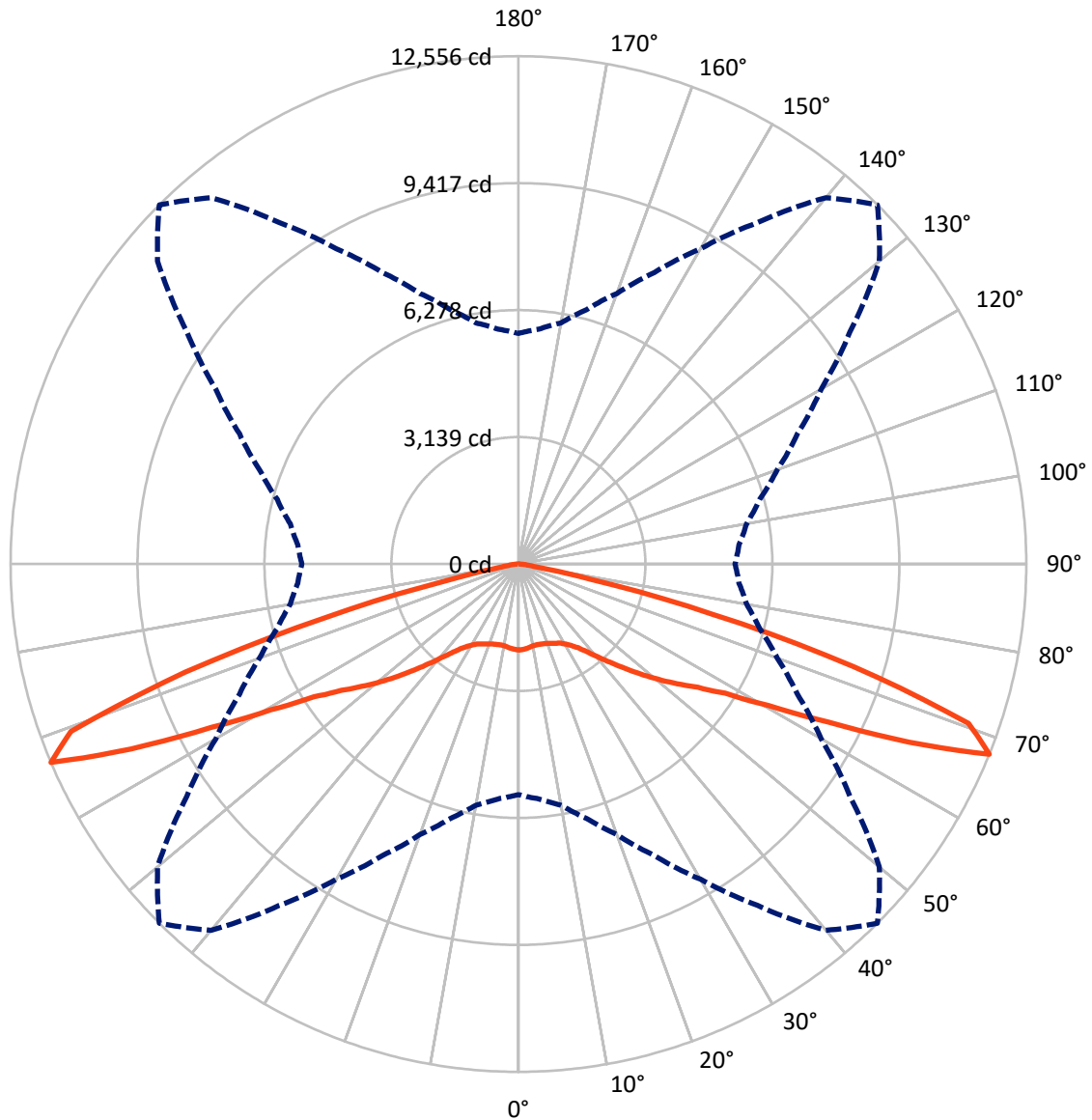


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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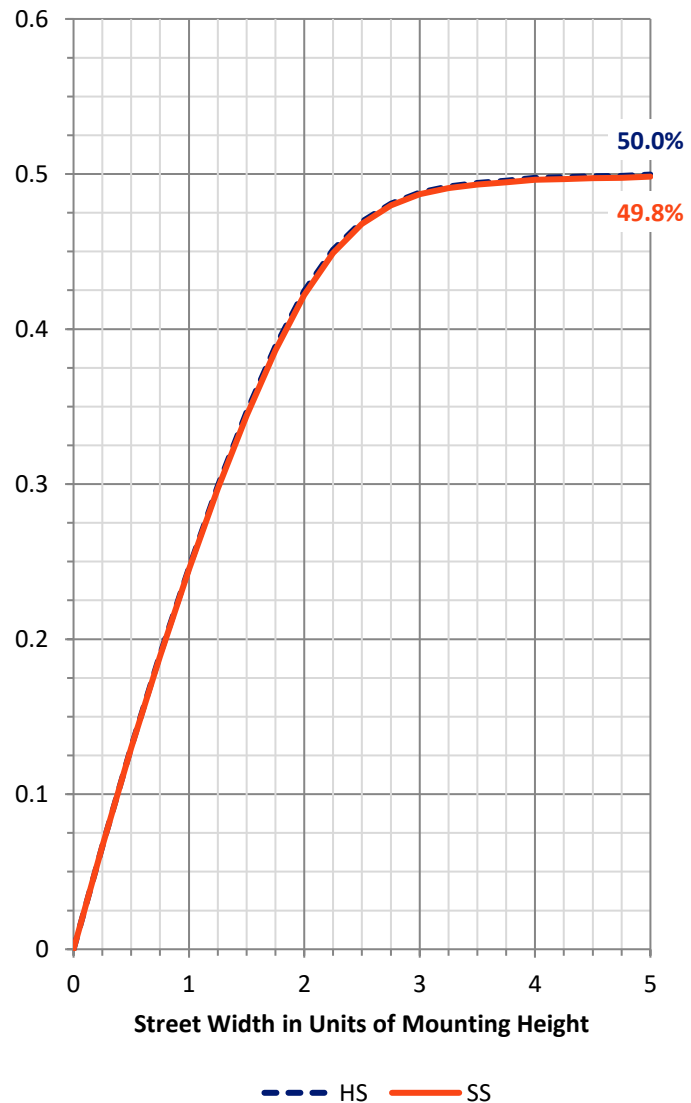
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10666.6	0.0	10666.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	10666.6	0.0	10666.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	21333.1	0.0	21333.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.0	0.9
10°-20°	577.4	2.7
20°-30°	981.6	4.6
30°-40°	1604.6	7.5
40°-50°	2864.4	13.4
50°-60°	4829.5	22.6
60°-70°	7494.7	35.1
70°-80°	2633.3	12.3
80°-90°	148.8	0.7
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°	21333.1	100.0
0°-180°	21333.1	100.0



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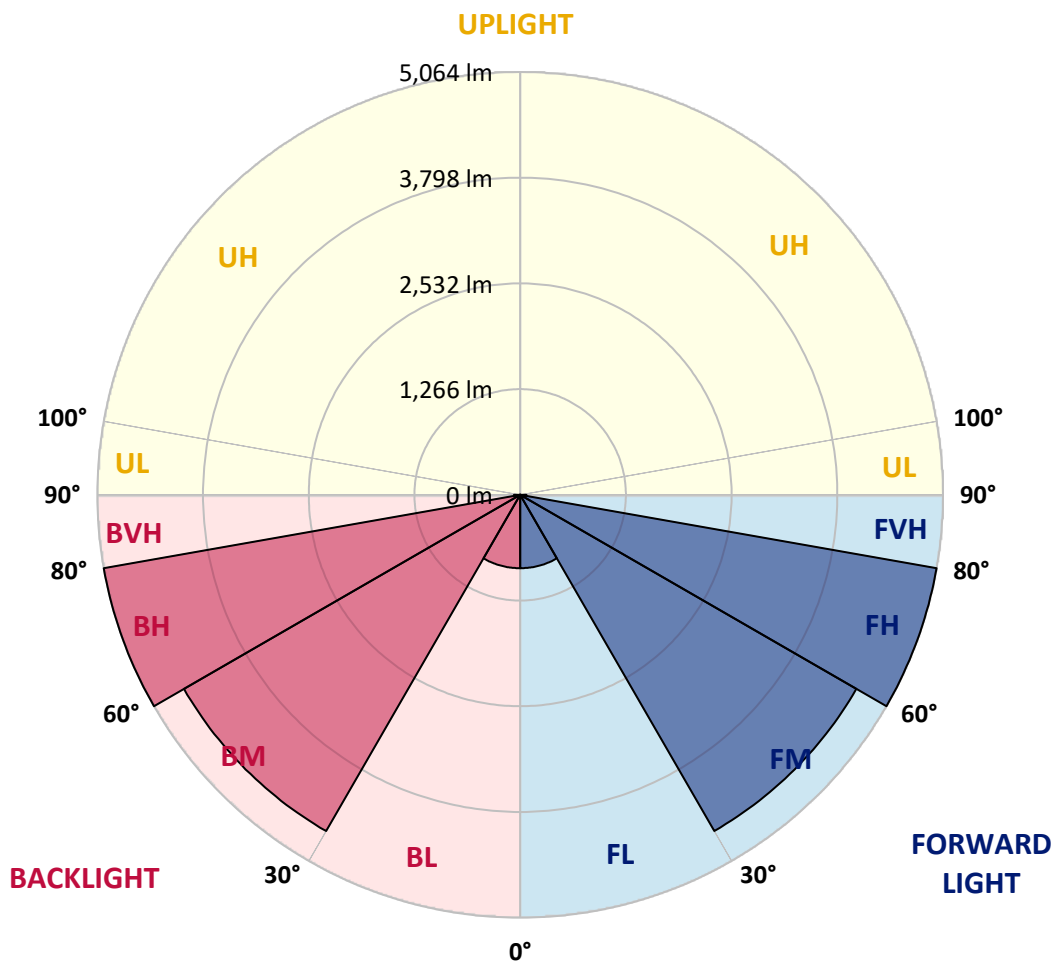
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	879.0	4.1			
FM	(30°-60°)	4649.2	21.8			
FH	(60°-80°)	5064.0	23.7			G3/7500
FVH	(80°-90°)	74.4	0.3			G1/100
BL	(0°-30°)	879.0	4.1	B2/1000		
BM	(30°-60°)	4649.2	21.8	B3/5000		
BH	(60°-80°)	5064.0	23.7	B5		G3/7500
BVH	(80°-90°)	74.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9
2.5°	2118.1	2120.1	2120.1	2120.1	2119.1	2119.1	2117.1	2119.1	2118.1	2115.1	2116.1
5°	2100.4	2102.4	2102.4	2101.4	2104.4	2103.4	2100.4	2102.4	2101.4	2099.4	2100.4
7.5°	2074.9	2077.9	2077.9	2076.9	2079.8	2078.8	2076.9	2077.9	2077.9	2074.9	2074.9
10°	2046.5	2048.4	2048.4	2047.5	2052.4	2052.4	2051.4	2054.3	2055.3	2052.4	2050.4
12.5°	2020.0	2022.9	2022.9	2026.9	2031.8	2033.7	2038.6	2042.5	2046.5	2045.5	2041.6
15°	2004.3	2006.2	2010.2	2015.1	2022.9	2029.8	2037.6	2046.5	2054.3	2056.3	2050.4
17.5°	1994.5	1997.4	2003.3	2010.2	2021.0	2032.7	2044.5	2056.3	2067.1	2071.0	2064.1
20°	1991.5	1993.5	1999.4	2011.2	2025.9	2043.5	2060.2	2073.9	2088.7	2093.6	2088.7
22.5°	1997.4	2001.3	2008.2	2021.9	2041.6	2064.1	2083.8	2102.4	2121.0	2129.9	2123.0
25°	2023.9	2027.8	2036.7	2054.3	2075.9	2099.4	2122.0	2143.6	2160.3	2169.1	2164.2
27.5°	2073.0	2077.9	2088.7	2106.3	2129.9	2155.4	2179.9	2197.6	2211.3	2214.2	2208.3
30°	2146.5	2157.3	2170.1	2189.7	2217.2	2238.8	2263.3	2279.0	2295.7	2295.7	2290.8
32.5°	2261.3	2272.1	2285.8	2304.5	2326.1	2349.6	2371.2	2384.9	2402.6	2403.6	2391.8
35°	2433.0	2437.9	2449.7	2461.5	2481.1	2501.7	2520.3	2529.2	2543.9	2544.8	2534.1
37.5°	2659.6	2660.6	2668.5	2672.4	2690.0	2712.6	2730.3	2736.2	2749.9	2747.9	2737.1
40°	2923.5	2928.4	2931.4	2937.3	2955.9	2977.5	2996.1	2999.1	3013.8	3010.8	2997.1
42.5°	3228.6	3230.6	3247.3	3256.1	3273.8	3284.6	3308.1	3311.0	3328.7	3320.9	3305.2
45°	3571.0	3588.7	3604.4	3622.0	3640.7	3653.4	3672.1	3668.2	3679.9	3668.2	3659.3
47.5°	3931.1	3943.8	3979.1	4006.6	4037.0	4047.8	4074.3	4062.5	4074.3	4057.6	4054.7
50°	4327.4	4350.0	4380.4	4411.8	4444.2	4461.8	4496.2	4481.4	4497.1	4481.4	4472.6
52.5°	4717.9	4723.8	4790.5	4836.6	4881.7	4902.3	4922.9	4916.0	4917.0	4916.0	4907.2
55°	5088.7	5102.4	5169.2	5231.9	5310.4	5368.3	5403.6	5399.7	5390.9	5382.0	5367.3
57.5°	5506.6	5520.4	5596.9	5674.4	5763.7	5846.1	5917.7	5991.3	6019.7	6027.6	5995.2
60°	6071.7	6070.7	6172.8	6267.0	6394.5	6517.1	6674.1	6834.0	7017.5	7102.8	6990.0
62.5°	6646.6	6670.2	6817.3	6984.1	7247.0	7503.1	7792.5	8077.0	8367.4	8603.8	8352.7
65°	6577.9	6668.2	6887.0	7264.7	7750.3	8327.2	8951.1	9611.4	10207.8	10617.9	10157.8
67.5°	5700.9	5829.4	6052.1	6511.2	7118.5	7950.4	8998.2	10304.0	11821.7	12555.5	11646.1
70°	4132.2	4277.4	4510.9	4959.2	5560.6	6351.3	7489.3	9057.1	11066.3	11806.0	10804.3
72.5°	2056.3	2134.8	2279.0	2564.5	3019.7	3661.3	4693.3	6200.2	7977.9	8656.8	7741.5
75°	698.5	734.8	759.3	852.5	996.7	1248.9	1762.0	2710.6	4135.1	4957.3	4076.3
77.5°	403.2	404.2	420.9	437.5	462.1	489.5	558.2	732.8	1267.5	1800.2	1311.7
80°	261.0	260.0	273.7	286.5	303.1	316.9	320.8	339.4	391.4	464.0	415.0
82.5°	135.4	152.1	182.5	199.2	230.5	236.4	228.6	221.7	234.5	243.3	249.2
85°	74.6	64.7	97.1	125.6	139.3	141.3	141.3	133.4	138.3	135.4	147.2
87.5°	34.3	31.4	38.3	61.8	65.7	55.9	58.9	52.0	37.3	36.3	41.2
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9	2125.9
2.5°	2116.1	2117.1	2117.1	2120.1	2121.0	2123.0	2125.0	2125.9
5°	2099.4	2102.4	2100.4	2103.4	2103.4	2105.3	2105.3	2106.3
7.5°	2074.9	2077.9	2077.9	2077.9	2076.9	2079.8	2079.8	2079.8
10°	2049.4	2051.4	2050.4	2048.4	2046.5	2049.4	2048.4	2047.5
12.5°	2041.6	2036.7	2032.7	2030.8	2026.9	2027.8	2024.9	2024.9
15°	2046.5	2037.6	2030.8	2027.8	2023.9	2021.9	2020.0	2021.0
17.5°	2059.2	2048.4	2039.6	2034.7	2029.8	2026.9	2022.9	2023.9
20°	2081.8	2069.0	2056.3	2046.5	2037.6	2032.7	2029.8	2028.8
22.5°	2115.1	2096.5	2077.9	2063.2	2051.4	2044.5	2041.6	2039.6
25°	2153.4	2132.8	2111.2	2094.5	2082.8	2073.9	2068.1	2068.1
27.5°	2201.5	2184.8	2165.2	2145.6	2134.8	2125.9	2122.0	2120.1
30°	2281.9	2266.2	2250.5	2231.9	2218.2	2209.3	2202.5	2196.6
32.5°	2384.9	2372.2	2359.4	2345.7	2332.9	2321.2	2310.4	2305.5
35°	2530.1	2520.3	2511.5	2495.8	2490.9	2484.0	2478.1	2473.2
37.5°	2730.3	2726.3	2726.3	2709.7	2705.7	2702.8	2696.9	2697.9
40°	2993.2	2997.1	2992.2	2986.3	2983.4	2975.5	2975.5	2982.4
42.5°	3304.2	3307.1	3317.9	3308.1	3318.9	3309.1	3303.2	3308.1
45°	3665.2	3676.0	3697.6	3687.8	3694.6	3678.0	3657.4	3658.3
47.5°	4070.4	4080.2	4089.0	4082.2	4083.1	4055.7	4028.2	4021.3
50°	4491.3	4495.2	4500.1	4490.3	4492.2	4461.8	4430.4	4431.4
52.5°	4907.2	4925.9	4945.5	4919.0	4913.1	4878.8	4834.6	4817.0
55°	5383.0	5409.5	5387.0	5340.8	5294.7	5248.6	5190.7	5180.9
57.5°	5969.7	5924.6	5853.9	5766.6	5702.9	5638.1	5579.2	5554.7
60°	6785.9	6616.2	6488.7	6359.2	6277.7	6198.3	6120.8	6109.0
62.5°	7939.6	7646.3	7392.2	7124.4	6905.6	6734.9	6598.6	6560.3
65°	9385.7	8692.1	8090.7	7529.6	7042.0	6674.1	6442.6	6340.5
67.5°	10007.7	8638.2	7607.1	6810.5	6172.8	5727.4	5477.2	5352.6
70°	8794.1	7163.6	6042.3	5244.7	4663.9	4189.1	3962.5	3829.0
72.5°	6050.1	4557.0	3603.4	2941.2	2477.2	2079.8	1922.9	1911.1
75°	2716.5	1799.2	1240.0	955.5	804.5	699.5	667.1	642.6
77.5°	760.3	562.1	501.3	468.9	437.5	401.2	387.5	390.5
80°	369.9	349.3	335.5	314.9	286.5	256.1	242.3	248.2
82.5°	245.3	242.3	251.1	236.4	195.2	165.8	139.3	127.5
85°	149.1	151.1	154.0	155.0	131.5	92.2	62.8	70.6
87.5°	58.9	67.7	73.6	76.5	71.6	44.1	35.3	36.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)