

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: P190851

Luminaire Tested: **GLEON-AF-03-LED-E1-5NQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190851  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-03-LED-E1-5NQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19176.2 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 166  
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

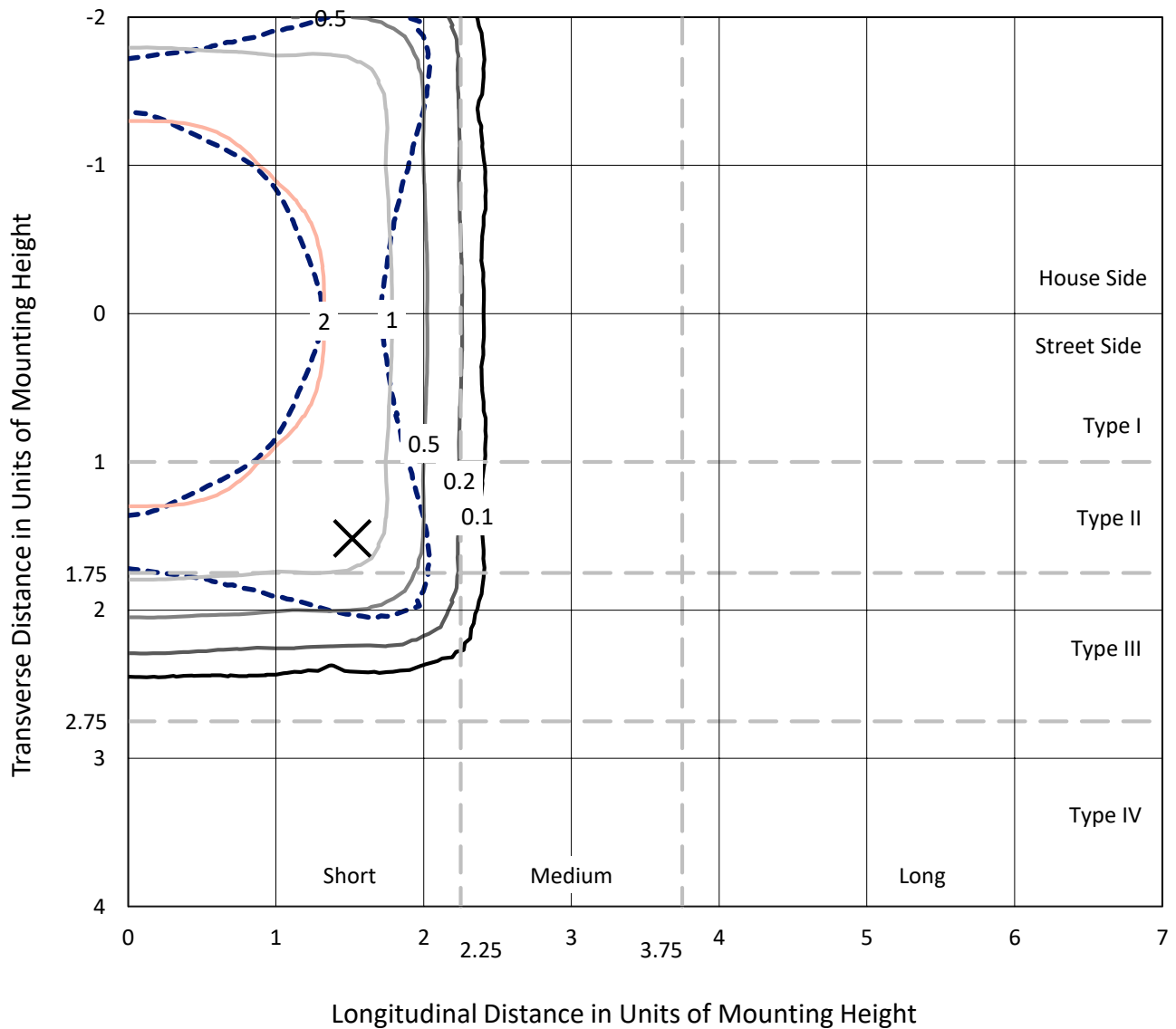


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### Iso-Footcandle Lines of Horizontal Illumination

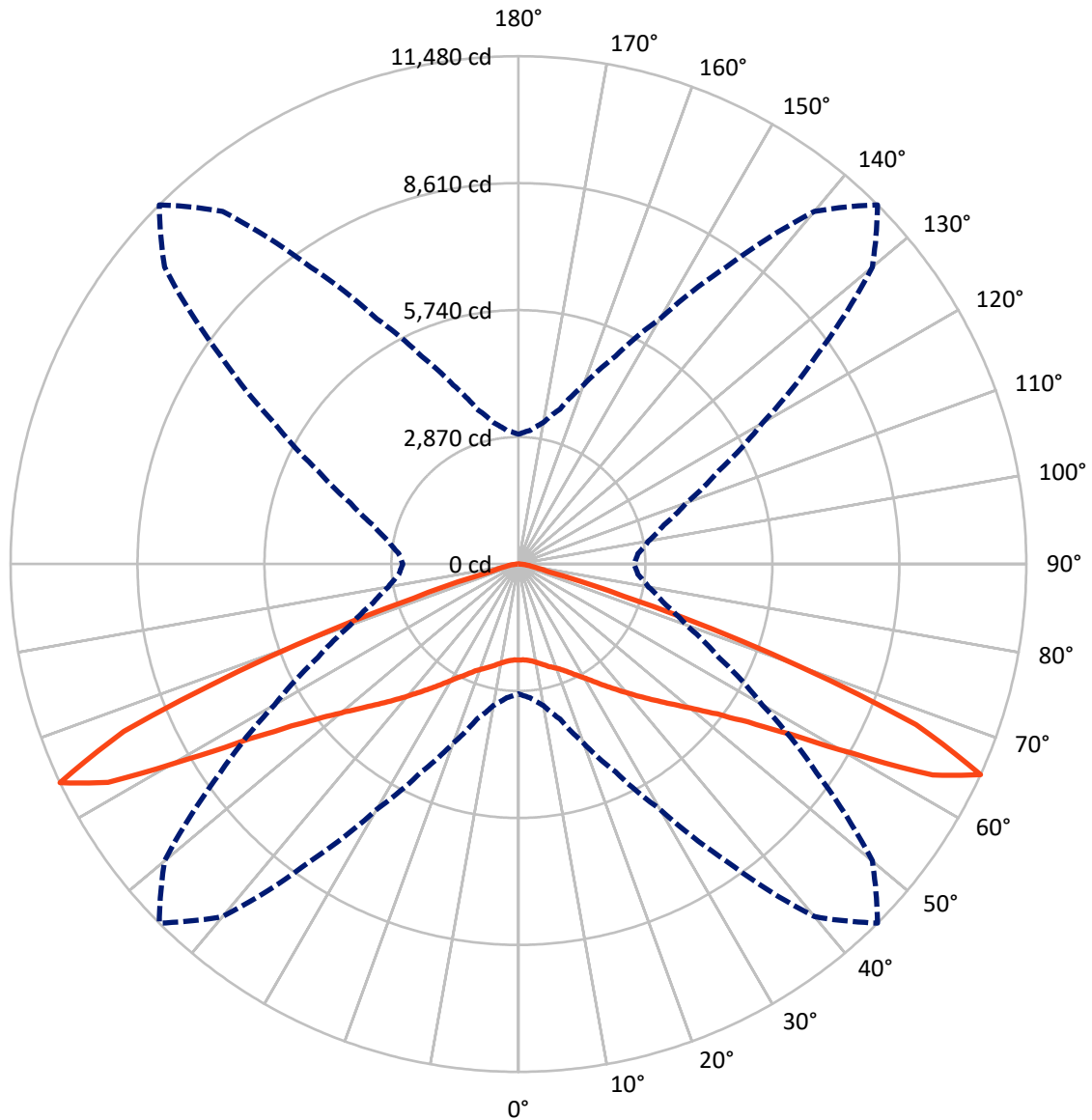
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9588.1	0.0	9588.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	9588.1	0.0	9588.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	19176.2	0.0	19176.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.5	1.1
10°-20°	678.3	3.5
20°-30°	1268.2	6.6
30°-40°	2144.9	11.2
40°-50°	3507.2	18.3
50°-60°	5577.0	29.1
60°-70°	5041.3	26.3
70°-80°	638.0	3.3
80°-90°	109.7	0.6
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°	19176.2	100.0
0°-180°	19176.2	100.0



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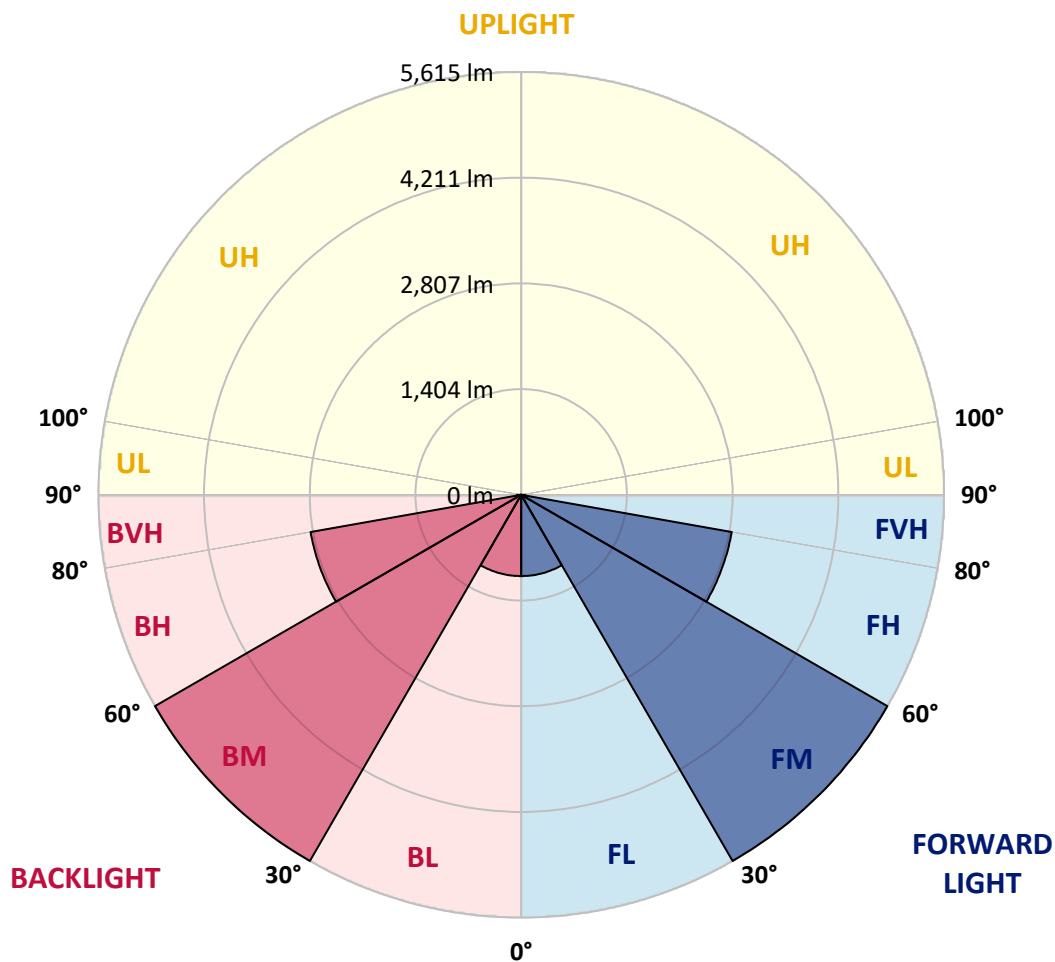
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1079.0	5.6			
FM	(30°-60°)	5614.6	29.3			
FH	(60°-80°)	2839.6	14.8			G2/5000
FVH	(80°-90°)	54.9	0.3			G1/100
BL	(0°-30°)	1079.0	5.6	B3/2500		
BM	(30°-60°)	5614.6	29.3	B4/8500		
BH	(60°-80°)	2839.6	14.8	B4/5000		G2/5000
BVH	(80°-90°)	54.9	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8
2.5°	2171.6	2173.4	2175.2	2173.4	2175.2	2172.5	2170.7	2173.4	2170.7	2168.0	2169.8
5°	2190.4	2191.4	2191.4	2188.7	2191.4	2189.5	2186.9	2190.4	2187.8	2185.0	2186.9
7.5°	2221.8	2225.5	2222.8	2220.1	2221.8	2220.1	2218.3	2219.2	2218.3	2215.6	2216.5
10°	2264.1	2266.8	2265.0	2264.1	2265.9	2265.0	2263.2	2262.3	2263.2	2260.5	2260.5
12.5°	2315.2	2314.4	2313.5	2314.4	2317.1	2317.1	2316.2	2317.1	2318.9	2319.7	2318.0
15°	2365.6	2367.4	2367.4	2367.4	2372.7	2377.2	2380.0	2381.7	2385.3	2386.2	2382.7
17.5°	2428.5	2428.5	2427.6	2428.5	2433.8	2441.1	2443.7	2447.3	2450.9	2453.6	2449.1
20°	2498.5	2500.3	2500.3	2502.1	2509.3	2517.4	2517.4	2519.1	2517.4	2519.1	2516.5
22.5°	2583.9	2589.2	2589.2	2590.1	2597.3	2607.2	2604.4	2607.2	2602.7	2606.3	2602.7
25°	2695.2	2703.2	2701.5	2701.5	2706.8	2713.2	2714.1	2719.4	2718.5	2723.0	2720.3
27.5°	2820.9	2833.5	2837.1	2836.2	2839.8	2846.1	2847.9	2854.1	2850.6	2854.1	2852.4
30°	2971.8	2977.2	2984.4	2987.1	2991.5	2997.9	2997.9	2998.8	2994.3	2999.6	3002.4
32.5°	3128.1	3137.9	3145.2	3161.3	3169.4	3173.9	3173.0	3174.7	3170.3	3177.5	3182.8
35°	3334.6	3341.8	3353.5	3366.0	3376.9	3375.9	3373.3	3374.1	3374.1	3380.4	3385.9
37.5°	3583.4	3585.2	3600.5	3618.4	3623.8	3618.4	3602.2	3598.6	3590.6	3598.6	3607.6
40°	3846.5	3852.8	3883.3	3895.1	3897.7	3887.8	3864.5	3851.0	3833.1	3842.9	3855.5
42.5°	4122.3	4134.9	4162.7	4183.4	4192.4	4186.0	4153.7	4133.0	4109.7	4115.1	4127.6
45°	4427.6	4442.9	4482.4	4502.1	4519.2	4509.4	4477.9	4446.5	4409.6	4412.4	4432.1
47.5°	4768.9	4784.1	4835.4	4868.6	4877.5	4875.8	4840.7	4797.6	4747.3	4745.6	4762.7
50°	5151.5	5166.7	5230.6	5281.7	5307.8	5305.0	5263.7	5202.6	5141.6	5142.5	5164.1
52.5°	5525.1	5544.0	5610.4	5698.4	5749.6	5786.4	5761.3	5703.8	5629.3	5631.0	5650.8
55°	5875.3	5906.8	5983.1	6102.5	6197.8	6301.1	6330.6	6328.9	6284.0	6296.6	6316.3
57.5°	6045.1	6091.8	6209.4	6398.0	6592.0	6802.2	6980.0	7112.9	7169.6	7254.9	7235.0
60°	5723.6	5798.1	5971.5	6249.0	6632.4	7070.7	7540.4	7999.4	8391.0	8686.4	8516.7
62.5°	4686.2	4783.2	4993.4	5349.1	5929.2	6630.7	7529.6	8614.6	9796.4	10509.5	10000.3
65°	2932.3	3032.8	3246.6	3627.4	4306.4	5178.4	6398.0	8196.0	10404.4	11479.5	10443.1
67.5°	1143.2	1198.1	1313.9	1557.3	2067.4	2843.4	4067.5	6107.9	8749.3	9691.3	8586.8
70°	573.0	578.4	600.0	644.9	754.4	979.8	1490.8	2831.7	5017.7	6060.4	4837.1
72.5°	414.0	414.9	425.6	445.5	480.5	530.8	627.8	866.6	1631.8	2494.1	1529.4
75°	317.0	320.6	326.9	337.7	356.5	381.7	416.8	499.3	618.8	717.6	603.5
77.5°	244.3	251.4	255.9	265.9	277.5	294.6	304.4	335.9	390.7	411.3	405.1
80°	185.9	192.2	202.0	210.1	218.2	226.3	222.7	237.1	265.9	282.9	273.9
82.5°	118.6	125.7	154.5	161.6	165.2	170.6	164.4	165.2	177.8	188.6	177.8
85°	76.3	80.8	97.9	106.9	107.8	111.4	108.6	102.4	102.4	93.4	105.1
87.5°	35.0	35.9	44.0	52.1	53.9	48.5	47.6	45.8	36.8	35.0	37.7
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°	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8	2169.8
2.5°	2168.9	2170.7	2171.6	2174.3	2175.2	2175.2	2176.1	2177.9
5°	2185.9	2188.7	2189.5	2193.1	2194.0	2193.1	2194.9	2195.9
7.5°	2216.5	2221.0	2222.8	2226.4	2223.7	2227.3	2228.2	2228.2
10°	2261.4	2265.9	2266.8	2270.4	2268.6	2270.4	2270.4	2268.6
12.5°	2320.7	2321.6	2318.9	2321.6	2318.0	2319.7	2317.1	2315.2
15°	2386.2	2383.6	2377.2	2377.2	2371.9	2372.7	2371.9	2371.0
17.5°	2450.0	2444.6	2440.1	2438.3	2433.8	2433.0	2430.2	2430.2
20°	2520.0	2517.4	2514.7	2511.0	2506.6	2502.1	2501.2	2503.0
22.5°	2604.4	2603.6	2603.6	2601.8	2595.5	2591.0	2588.3	2588.3
25°	2717.7	2709.6	2709.6	2708.7	2706.0	2703.2	2697.9	2700.6
27.5°	2845.1	2840.6	2844.3	2843.4	2840.6	2840.6	2837.1	2837.1
30°	3002.4	3000.5	3005.9	3001.4	2992.4	2991.5	2987.9	2983.4
32.5°	3183.7	3182.0	3190.1	3184.7	3170.3	3162.2	3155.0	3151.4
35°	3385.9	3386.7	3396.6	3393.0	3376.9	3371.4	3358.9	3357.1
37.5°	3606.7	3621.1	3638.2	3641.8	3628.3	3624.7	3611.2	3604.1
40°	3866.3	3885.2	3911.3	3917.5	3903.2	3900.4	3881.6	3871.7
42.5°	4143.0	4175.3	4207.6	4212.9	4198.6	4184.3	4166.3	4159.1
45°	4451.9	4490.4	4532.7	4543.4	4522.0	4504.9	4481.5	4481.5
47.5°	4798.6	4847.0	4894.6	4924.3	4904.5	4886.5	4858.7	4840.7
50°	5208.0	5274.5	5336.5	5367.0	5335.6	5301.4	5253.0	5236.8
52.5°	5721.8	5793.6	5847.5	5831.3	5782.8	5735.3	5682.3	5660.7
55°	6377.4	6401.6	6401.6	6340.6	6243.6	6163.7	6080.1	6052.3
57.5°	7197.4	7104.0	6960.3	6778.0	6548.9	6349.6	6214.8	6151.1
60°	8161.0	7711.9	7204.5	6706.1	6296.6	5958.9	5758.6	5666.9
62.5°	8803.1	7628.5	6611.7	5811.6	5222.5	4815.6	4538.9	4431.2
65°	8227.5	6362.1	5000.6	4043.2	3401.1	2987.1	2713.2	2612.5
67.5°	6026.2	3986.6	2662.8	1908.4	1398.4	1115.4	1003.2	956.5
70°	2705.1	1403.7	860.4	671.8	579.3	531.6	511.1	503.8
72.5°	815.5	590.0	497.6	449.1	412.2	388.9	371.8	370.0
75°	492.1	409.5	363.8	335.0	311.6	292.8	283.8	281.1
77.5°	344.0	300.8	279.3	258.6	240.7	226.3	218.2	212.0
80°	241.6	221.0	211.0	199.4	187.7	174.2	162.5	157.1
82.5°	161.6	157.1	157.1	150.0	140.1	127.6	104.1	98.8
85°	104.1	103.3	105.1	102.4	95.2	81.7	67.3	63.7
87.5°	48.5	49.4	54.8	53.9	52.1	43.1	34.2	32.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)