

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: P321088

Luminaire Tested: **GLEON-SA4C-827-U-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P321088  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA4C-827-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21518 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

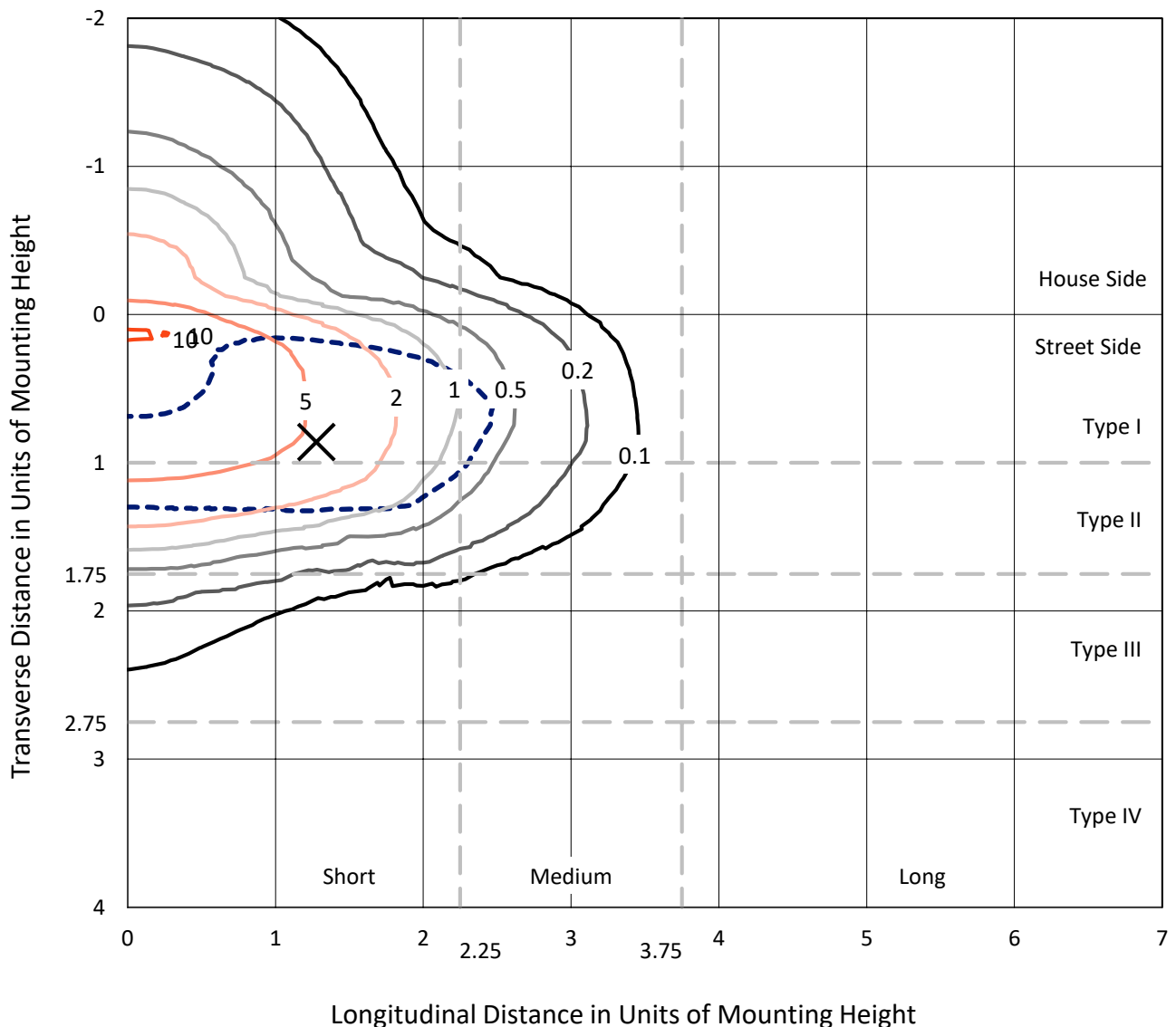
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

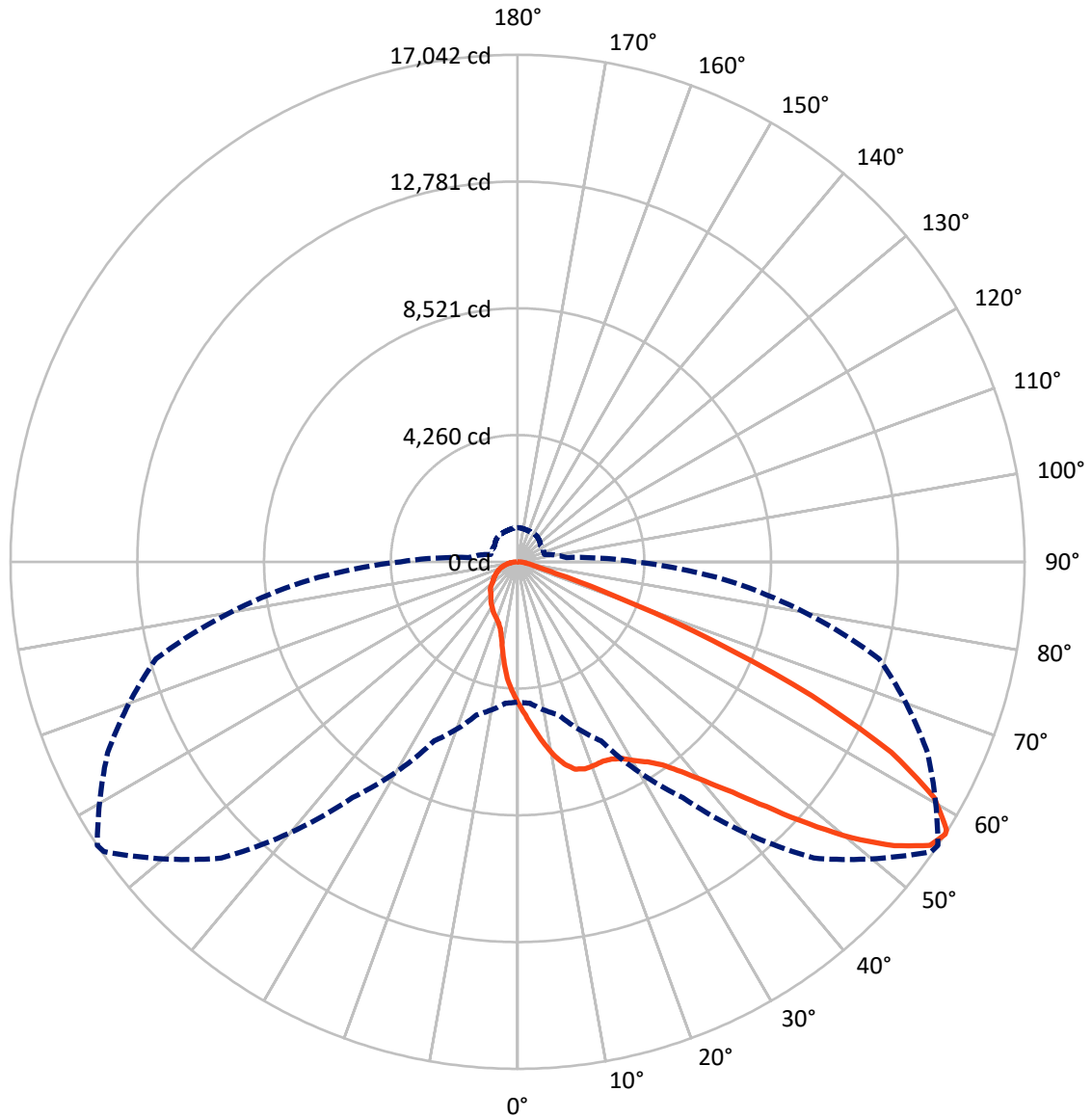
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 57-Deg Vertical

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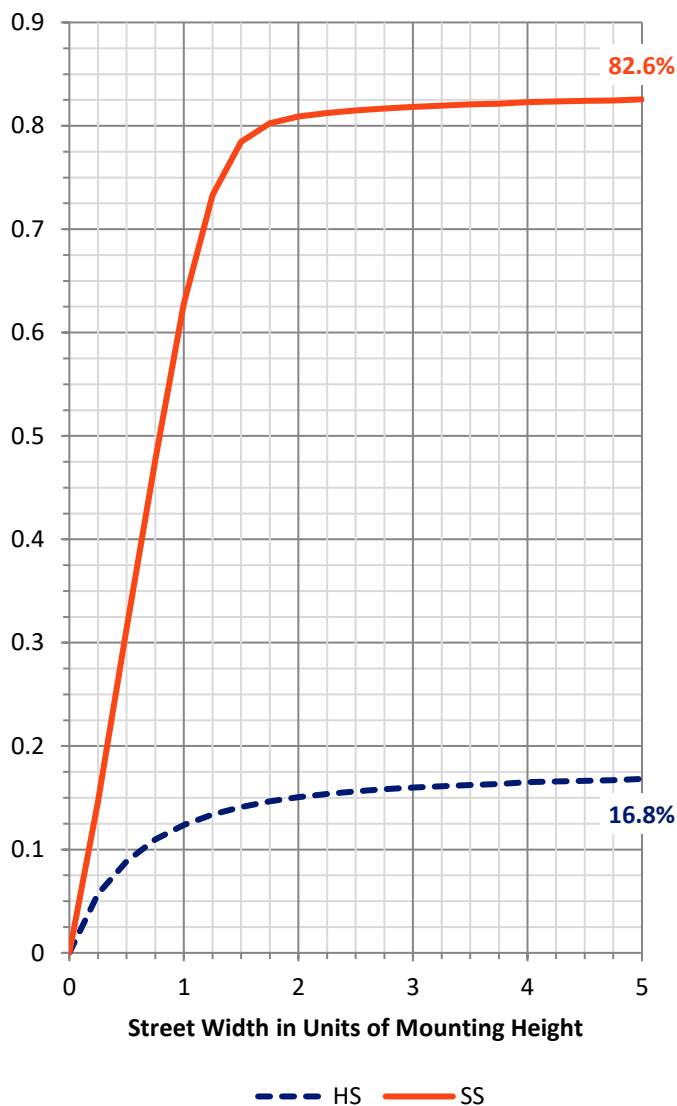
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3709.2	0.0	3709.2
	% Fixture	17.2	0.0	17.2
<b>Street Side</b>	Lumens	17808.8	0.0	17808.8
	% Fixture	82.8	0.0	82.8
<b>Total</b>	Lumens	21518.0	0.0	21518.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	455.9	2.1
10°-20°	1289.0	6.0
20°-30°	2099.5	9.8
30°-40°	3138.5	14.6
40°-50°	4760.4	22.1
50°-60°	5335.6	24.8
60°-70°	3151.4	14.6
70°-80°	1032.5	4.8
80°-90°	255.1	1.2
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°	21518.0	100.0
0°-180°	21518.0	100.0

**Coefficient of Utilization**

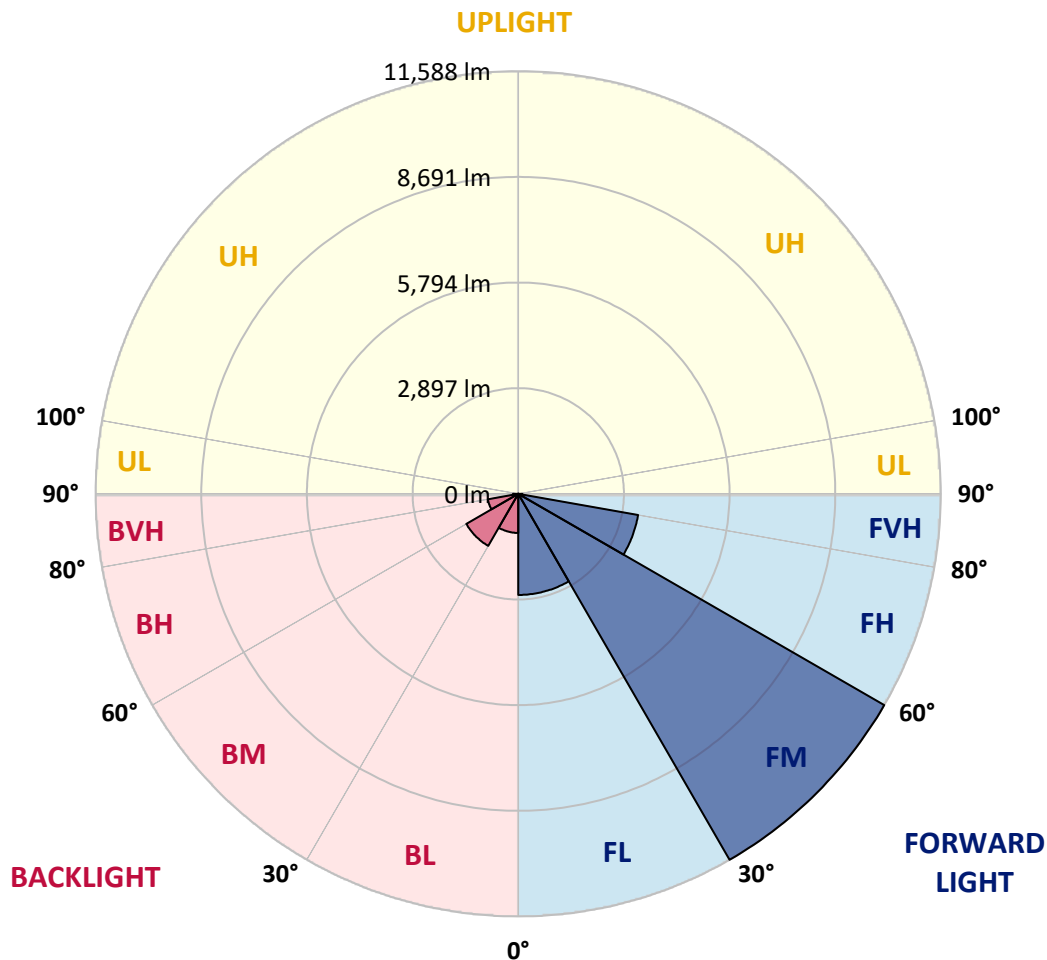


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2771.8	12.9			
FM (30°-60°)	11588.2	53.9			
FH (60°-80°)	3336.4	15.5			G2/5000
FVH (80°-90°)	112.3	0.5			G2/225
BL (0°-30°)	1072.5	5.0	B3/2500		
BM (30°-60°)	1646.4	7.7	B2/2500		
BH (60°-80°)	847.5	3.9	B2/1000		G2/1000
BVH (80°-90°)	142.8	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7
2.5°	5480.4	5530.7	5508.5	5431.6	5372.4	5288.9	5195.7	5167.6	5069.3	4959.1	4826.7
5°	6347.8	6322.7	6286.5	6166.7	6040.2	5893.0	5659.4	5622.4	5403.5	5154.3	4891.0
7.5°	6841.8	6839.6	6818.2	6747.9	6632.5	6440.3	6158.5	6114.9	5784.3	5383.5	4975.3
10°	6770.1	6764.9	6800.4	6873.6	6908.4	6868.4	6631.1	6587.4	6181.5	5637.2	5072.9
12.5°	6362.6	6365.6	6422.5	6576.3	6785.6	7037.1	6998.6	6977.2	6593.4	5924.1	5191.3
15°	6045.4	6052.0	6097.2	6231.0	6478.0	6934.3	7221.9	7229.3	6991.9	6240.6	5329.6
17.5°	5906.4	5920.4	5941.1	6035.0	6261.3	6729.4	7275.2	7315.1	7341.0	6568.9	5462.7
20°	5950.7	5964.0	5970.0	6029.9	6215.5	6605.2	7238.2	7309.9	7608.7	6878.1	5595.8
22.5°	6149.7	6157.8	6161.5	6177.0	6321.2	6640.7	7213.8	7289.2	7802.4	7155.4	5696.3
25°	6479.5	6473.6	6449.9	6429.9	6526.8	6781.2	7270.0	7341.7	7959.9	7406.8	5762.2
27.5°	6874.4	6867.0	6821.1	6766.4	6821.9	7000.1	7431.9	7488.9	8101.2	7642.0	5795.4
30°	7348.4	7329.2	7242.6	7177.6	7199.0	7328.4	7698.9	7750.7	8319.3	7908.9	5828.0
32.5°	7896.3	7875.6	7750.7	7642.7	7642.7	7750.7	7974.0	8016.9	8504.2	8210.6	5880.5
35°	8582.6	8556.7	8394.0	8212.9	8161.8	8216.5	8348.9	8379.2	8837.0	8590.7	5975.9
37.5°	9391.6	9356.9	9146.1	8903.5	8791.9	8788.9	8884.3	8946.4	9368.7	9089.9	6137.8
40°	10202.8	10178.4	9994.3	9803.5	9584.6	9514.4	9661.5	9680.8	10063.8	9709.6	6344.9
42.5°	10829.9	10825.5	10791.5	10816.6	10592.6	10450.6	10565.9	10581.5	10912.8	10380.3	6565.3
45°	11161.2	11168.6	11333.5	11698.8	11781.7	11678.1	11735.1	11739.5	11883.0	11057.0	6767.1
47.5°	10895.7	10934.2	11351.3	12168.4	12846.5	13190.4	13095.7	13150.5	12823.6	11638.2	6925.4
50°	9861.2	9908.5	10618.4	11959.1	13343.5	14653.9	14604.3	14591.7	13582.3	12064.1	7011.2
52.5°	8579.6	8616.6	9202.3	10871.3	12978.9	15462.9	15917.7	15852.6	14256.8	12382.9	7027.4
55°	6628.1	6685.8	7247.1	8700.2	11504.4	15153.8	16883.5	16825.0	14871.3	12550.0	7008.2
57°	4712.1	4772.7	5330.3	6639.9	9677.8	14083.7	16979.6	17041.7	15203.3	12578.1	7029.7
57.5°	4204.8	4266.9	4819.3	6091.2	9108.4	13697.0	16896.8	17000.3	15263.2	12573.7	7041.5
60°	2117.2	2140.8	2492.8	3400.2	5757.7	11073.2	15816.4	16083.3	15317.2	12356.3	7092.5
62.5°	1316.3	1299.3	1288.2	1566.3	2801.2	7343.2	13586.8	14100.7	14284.1	11829.7	6969.0
65°	1157.3	1125.5	1003.5	981.3	1237.2	3566.6	10231.7	10871.3	12076.7	11000.0	6674.7
67.5°	1087.1	1056.0	918.5	835.6	836.4	1413.9	6352.3	7072.5	9407.9	9597.2	5980.3
70°	1014.6	986.5	857.8	760.2	712.1	783.1	2922.5	3469.0	6132.6	7543.6	4998.3
72.5°	921.4	902.2	780.2	679.6	628.6	586.4	1118.9	1321.5	3550.3	5066.3	3471.2
75°	823.8	806.1	701.8	605.6	543.5	461.4	630.1	678.9	1803.6	2591.9	1709.0
77.5°	716.6	706.2	624.1	535.4	485.8	382.3	445.9	469.6	773.5	1111.5	857.1
80°	570.2	590.1	545.7	477.0	431.1	306.2	315.8	331.3	450.4	542.8	486.6
82.5°	371.2	406.0	427.4	387.5	355.0	241.1	227.0	233.7	293.6	331.3	211.5
85°	154.6	173.8	281.0	253.6	235.9	176.0	152.3	155.3	181.9	188.6	86.5
87.5°	68.8	73.2	123.5	116.1	99.8	60.6	65.1	71.0	96.9	91.7	33.3
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°	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7	4772.7
2.5°	4777.1	4715.0	4608.5	4491.0	4394.8	4317.9	4240.3	4187.0	4124.9	4091.6	4074.6
5°	4780.8	4658.8	4434.8	4204.8	3999.2	3811.4	3632.4	3494.9	3366.2	3296.7	3277.4
7.5°	4796.4	4613.0	4250.6	3872.0	3506.7	3173.2	2915.8	2754.6	2638.5	2586.8	2572.0
10°	4808.9	4559.0	4022.9	3462.3	2965.4	2627.4	2427.8	2337.5	2297.6	2291.0	2284.3
12.5°	4838.5	4503.5	3783.3	3034.9	2544.6	2310.9	2241.4	2235.5	2246.6	2262.9	2262.9
15°	4885.1	4448.8	3509.7	2668.1	2276.9	2194.8	2208.9	2241.4	2271.7	2296.9	2300.6
17.5°	4919.1	4381.5	3215.3	2374.5	2134.2	2156.4	2206.7	2252.5	2283.6	2308.0	2310.2
20°	4943.5	4277.2	2901.0	2150.5	2052.1	2120.9	2183.7	2224.4	2245.9	2270.3	2274.0
22.5°	4931.0	4137.5	2622.3	1990.0	1985.5	2069.1	2129.0	2177.8	2161.5	2137.9	2153.4
25°	4870.3	3945.2	2335.3	1870.2	1915.3	1999.6	2073.5	2041.0	1986.3	1975.9	1981.9
27.5°	4762.4	3699.7	2069.9	1759.3	1834.0	1935.3	1930.8	1898.3	1879.1	1865.8	1873.9
30°	4646.3	3433.5	1837.6	1662.4	1743.7	1827.3	1810.3	1809.5	1790.3	1768.9	1779.2
32.5°	4531.6	3165.8	1653.5	1582.5	1675.7	1686.8	1723.8	1734.9	1697.1	1652.0	1649.1
35°	4431.8	2912.9	1513.7	1510.1	1593.6	1595.1	1649.1	1633.5	1539.6	1493.0	1493.0
37.5°	4357.1	2660.7	1407.3	1445.0	1485.6	1524.1	1551.5	1487.1	1471.6	1445.7	1445.0
40°	4324.6	2438.9	1340.7	1395.4	1409.5	1458.3	1388.0	1413.2	1420.6	1407.3	1407.3
42.5°	4290.6	2245.9	1283.0	1357.7	1355.5	1348.8	1313.3	1345.9	1375.5	1376.2	1374.0
45°	4256.5	2079.5	1232.0	1277.1	1308.2	1236.4	1243.1	1277.9	1319.3	1334.1	1334.1
47.5°	4218.8	1947.8	1185.4	1192.1	1240.1	1192.1	1186.9	1213.5	1262.3	1286.0	1291.2
50°	4136.0	1829.5	1132.2	1117.4	1130.7	1147.0	1151.4	1164.0	1218.0	1255.7	1264.5
52.5°	4021.4	1723.8	1064.1	1048.6	1048.6	1110.0	1130.7	1134.4	1180.2	1225.3	1234.2
55°	3926.0	1656.5	993.9	990.9	988.0	1070.8	1106.3	1112.2	1144.0	1179.5	1183.9
57°	3932.6	1651.3	939.9	942.9	942.1	1030.9	1083.4	1095.9	1112.2	1142.5	1147.7
57.5°	3936.3	1655.0	928.1	929.5	928.8	1019.8	1076.7	1090.8	1103.3	1135.1	1140.3
60°	3991.8	1664.6	880.0	863.7	867.4	960.6	1039.0	1056.7	1064.9	1107.0	1113.7
62.5°	3909.7	1621.7	841.5	802.4	802.4	898.5	986.5	1014.6	1027.2	1084.1	1095.2
65°	3671.6	1501.2	796.4	732.8	740.2	836.4	923.6	969.5	988.7	1059.7	1071.5
67.5°	3304.1	1361.4	748.4	670.7	678.1	771.3	858.6	908.1	938.4	1033.1	1042.7
70°	2825.6	1190.6	683.3	604.9	613.8	700.3	781.6	837.8	883.0	1007.9	1010.9
72.5°	2083.2	976.1	592.3	532.4	542.1	617.5	704.0	769.1	829.7	945.1	943.6
75°	1238.7	763.2	491.8	459.2	465.9	536.1	633.7	712.9	803.8	920.7	934.7
77.5°	751.3	574.6	400.8	384.5	392.7	464.4	583.5	667.8	792.7	868.2	863.7
80°	454.1	410.4	320.2	309.8	318.0	397.1	539.8	633.7	692.9	741.7	741.7
82.5°	237.4	250.7	235.2	227.0	238.1	322.4	491.0	553.1	612.3	525.8	491.0
85°	96.9	130.9	142.7	142.0	148.6	223.3	423.7	473.3	394.9	374.9	383.8
87.5°	32.5	55.5	69.5	59.9	62.9	140.5	293.6	228.5	271.4	189.3	179.7
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)