

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: P317899

Luminaire Tested: **GLEON-SA5D-827-U-T3R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317899  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA5D-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29148 lumens  
Efficiency: N/A  
Efficacy: 91.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

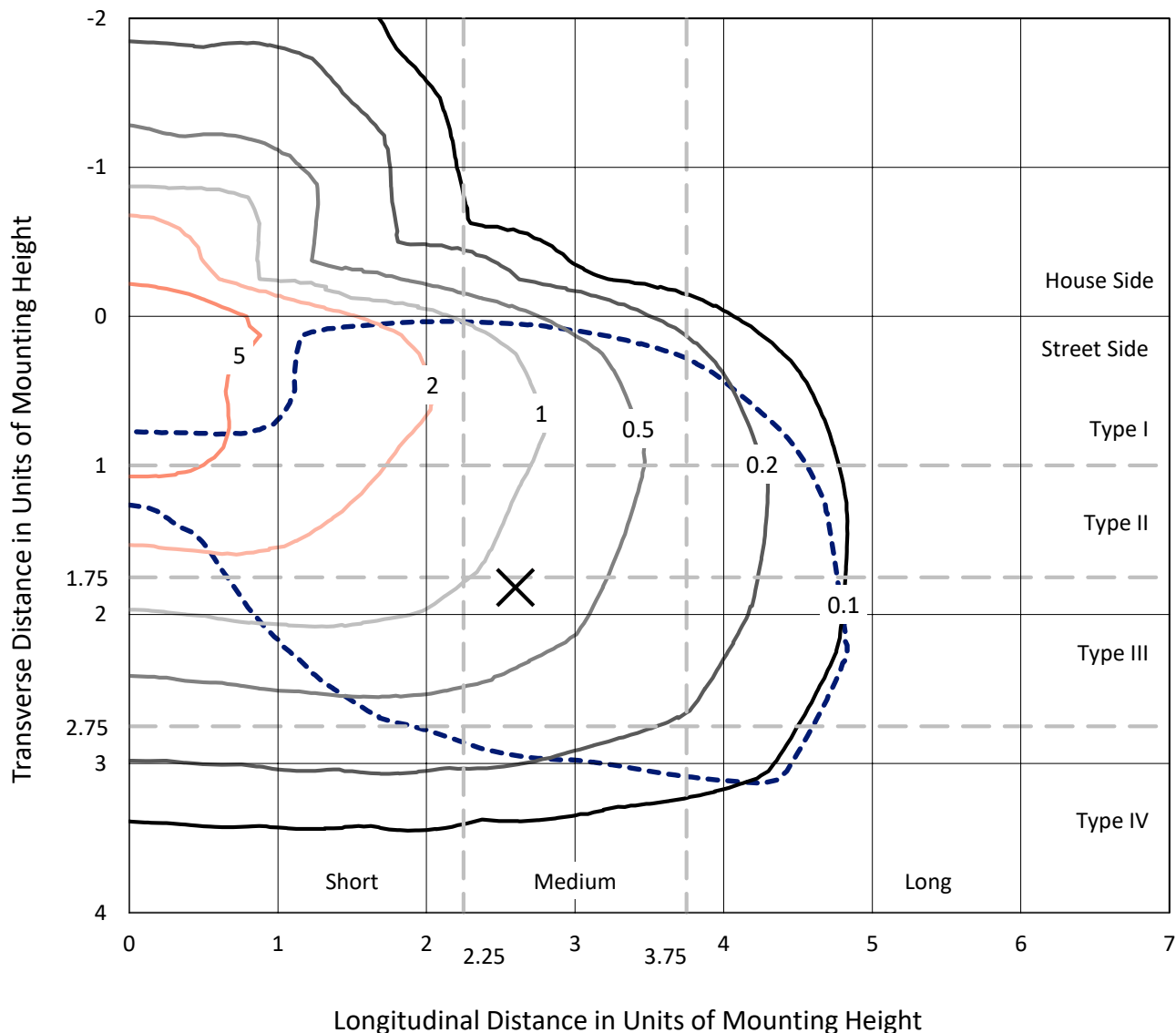
Input Watts (W): 320  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P317899  
 CATALOG NUMBER: GLEON-SA5D-827-U-T3R

### Iso-Footcandle Lines of Horizontal Illumination

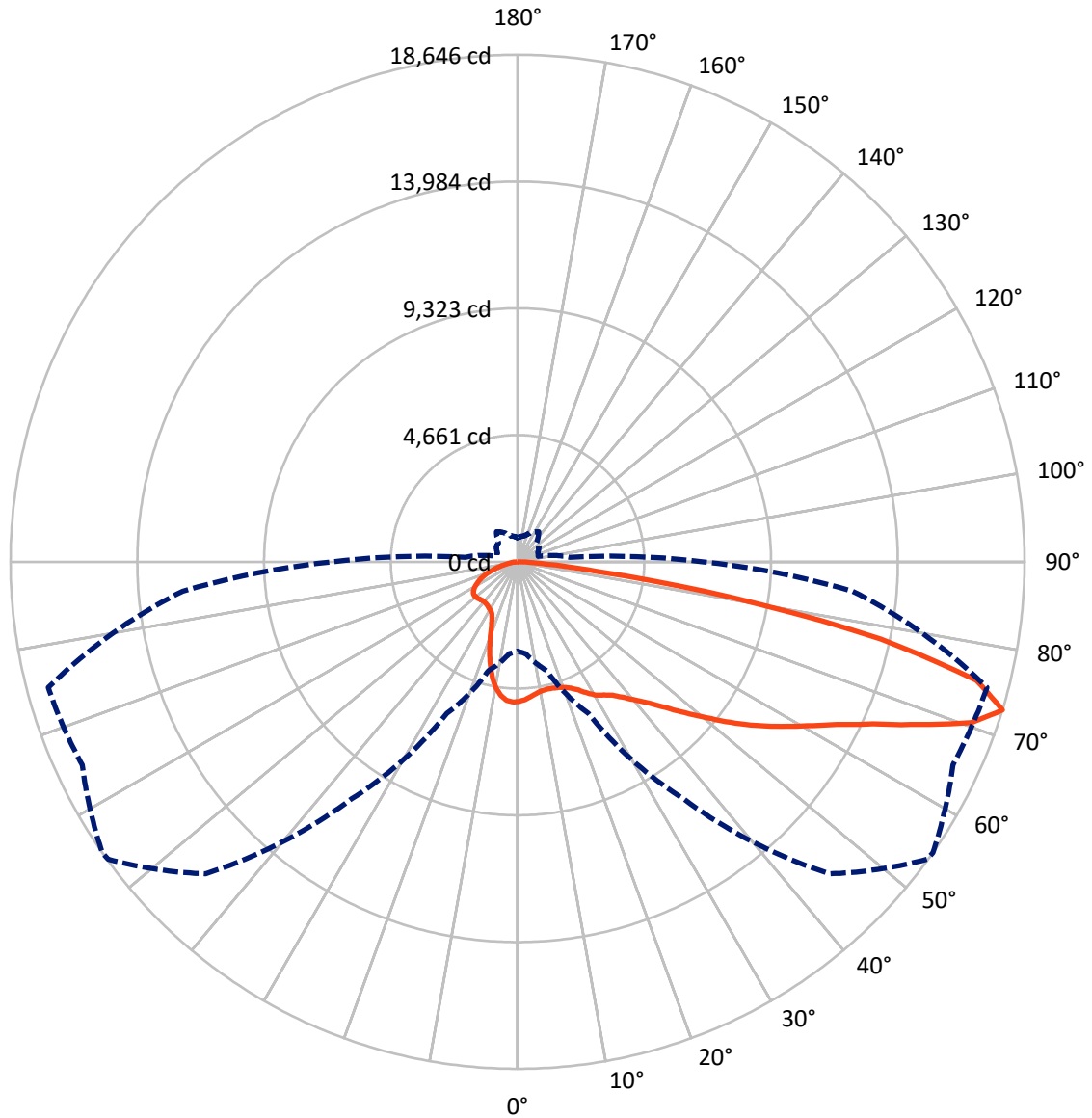
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P317899  
CATALOG NUMBER: GLEON-SA5D-827-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P317899  
 CATALOG NUMBER: GLEON-SA5D-827-U-T3R

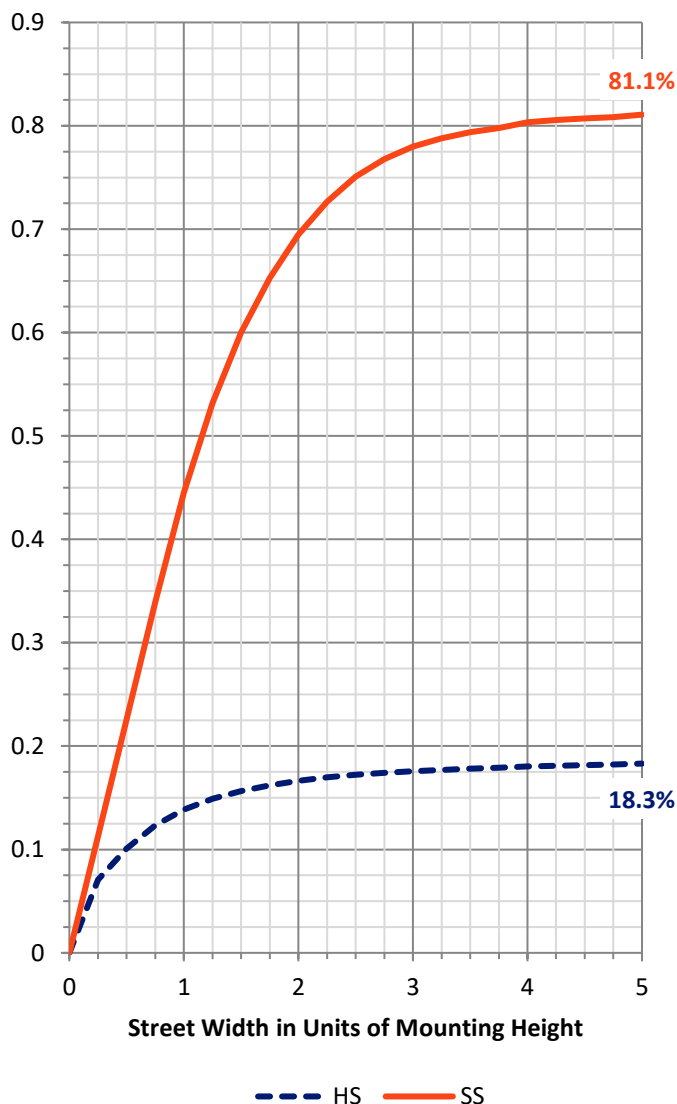
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5417.7	0.0	5417.7
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	23730.4	0.0	23730.4
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	29148.0	0.0	29148.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	465.2	1.6
10°-20°	1238.6	4.2
20°-30°	2042.1	7.0
30°-40°	3020.7	10.4
40°-50°	4216.3	14.5
50°-60°	5489.8	18.8
60°-70°	6746.7	23.1
70°-80°	5288.6	18.1
80°-90°	640.0	2.2
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°	29148.0	100.0
0°-180°	29148.0	100.0

**Coefficient of Utilization**

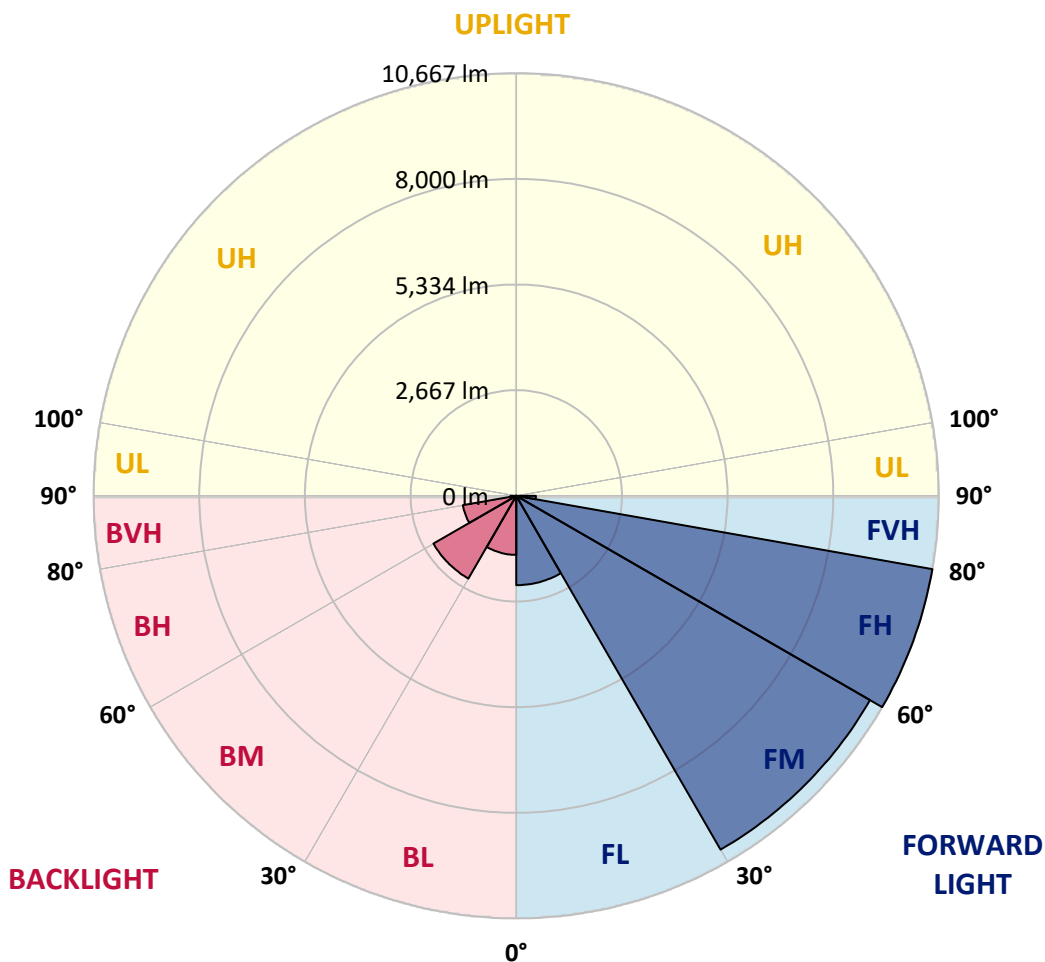


REPORT NUMBER: P317899  
 CATALOG NUMBER: GLEON-SA5D-827-U-T3R

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2255.2	7.7			
FM (30°-60°)	10313.1	35.4			
FH (60°-80°)	10667.2	36.6			G4/12000
FVH (80°-90°)	494.8	1.7			G3/500
BL (0°-30°)	1490.6	5.1	B3/2500		
BM (30°-60°)	2413.6	8.3	B2/2500		
BH (60°-80°)	1368.2	4.7	B3/2500		G3/2500
BVH (80°-90°)	145.2	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type IV Medium





REPORT NUMBER: P317899

CATALOG NUMBER: GLEON-SA5D-827-U-T3R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1
2.5°	4973.7	4961.9	4976.7	4997.3	5020.0	5050.5	5068.2	5076.1	5106.6	5118.4	5144.0
5°	4743.3	4737.4	4762.0	4797.5	4847.7	4918.6	4975.7	4986.5	5067.2	5124.3	5176.5
7.5°	4576.0	4576.0	4604.5	4646.9	4703.0	4798.5	4879.2	4894.0	5030.8	5153.9	5250.4
10°	4443.1	4448.0	4481.5	4531.7	4597.6	4699.0	4806.3	4823.1	5021.0	5222.8	5376.4
12.5°	4354.5	4366.3	4396.8	4442.1	4523.8	4646.9	4782.7	4805.4	5041.6	5321.2	5528.0
15°	4410.6	4430.3	4433.2	4451.9	4497.2	4631.1	4796.5	4820.1	5085.9	5421.7	5700.3
17.5°	4656.7	4663.6	4633.1	4593.7	4572.0	4657.7	4837.9	4862.5	5139.1	5521.1	5865.7
20°	5030.8	5026.9	4960.9	4854.6	4744.3	4758.1	4905.8	4931.4	5211.0	5608.7	6031.1
22.5°	5503.4	5489.6	5388.2	5192.3	5004.2	4925.5	5024.9	5046.6	5319.3	5733.8	6208.3
25°	6076.4	6045.8	5911.9	5649.1	5372.4	5169.6	5204.1	5224.8	5476.8	5873.6	6370.7
27.5°	6680.8	6650.3	6480.0	6162.0	5793.8	5477.8	5451.2	5468.9	5656.0	5976.9	6490.8
30°	7312.9	7280.4	7124.9	6768.5	6240.8	5796.8	5681.6	5688.5	5782.0	6033.0	6589.3
32.5°	7947.9	7917.4	7743.1	7329.6	6726.1	6139.4	5848.0	5839.1	5857.8	6091.1	6700.5
35°	8591.8	8603.6	8399.8	7942.0	7263.7	6520.4	6044.9	6026.1	5984.8	6210.3	6858.1
37.5°	9280.9	9273.0	9009.2	8530.7	7825.8	6933.9	6327.4	6324.5	6181.7	6435.7	7105.2
40°	9741.7	9746.6	9586.1	9133.2	8393.9	7391.7	6689.7	6682.8	6495.8	6773.4	7429.1
42.5°	9921.8	9954.3	9995.7	9708.2	8988.5	7922.3	7121.9	7112.1	6933.9	7257.8	7810.1
45°	9934.6	9999.6	10255.6	10219.2	9591.0	8529.7	7674.2	7646.6	7518.7	7901.6	8264.9
47.5°	9824.4	9891.3	10316.6	10523.4	10129.6	9170.7	8320.0	8298.4	8188.1	8707.0	8757.2
50°	9583.2	9647.2	10190.6	10672.0	10572.6	9787.0	9064.3	9007.2	8948.2	9637.3	9320.3
52.5°	9131.3	9254.3	10022.3	10707.5	10837.4	10334.3	9847.0	9809.6	9842.1	10618.9	9884.4
55°	8061.1	8198.9	9588.1	10677.9	11033.3	10794.1	10629.7	10627.7	10796.1	11648.7	10489.9
57.5°	7461.6	7559.0	8704.0	10627.7	11265.7	11250.9	11404.5	11423.2	11751.0	12770.0	11123.9
60°	7122.9	7225.3	8256.1	10441.6	11626.0	11841.6	12195.1	12232.5	12721.8	14011.5	11886.9
62.5°	6814.7	6927.0	7978.4	10062.6	12050.3	12686.3	13142.1	13175.6	13749.6	15287.4	12624.3
65°	6288.0	6415.0	7571.8	9813.5	12436.3	13788.0	14346.2	14368.8	14930.0	16624.3	13188.4
67.5°	5543.7	5659.9	6804.9	9263.2	12721.8	15125.9	15947.0	15959.8	16100.6	17568.5	13476.9
70°	4674.4	4718.7	5712.1	8127.1	12384.1	16377.2	17701.4	17704.3	17167.8	18173.0	13429.6
72.5°	3284.3	3388.7	4146.7	6152.2	10642.5	16224.6	18612.0	18645.5	17664.0	17867.8	12356.5
75°	2014.3	2124.6	2601.1	3728.3	6751.7	12760.2	17196.3	17428.7	16733.6	15931.2	10094.1
77.5°	1346.8	1388.2	1697.3	2173.8	3058.9	7341.4	13220.9	13658.0	13901.2	11618.1	6455.4
80°	751.2	829.9	1125.3	1350.7	1360.6	2917.1	7927.2	8029.6	7734.3	4626.2	1991.7
82.5°	397.7	441.1	751.2	793.5	742.3	976.6	2954.5	2957.5	2471.1	1240.5	591.7
85°	308.1	344.6	514.9	484.4	379.0	433.2	974.7	1027.8	840.8	508.0	193.0
87.5°	153.6	191.0	349.5	307.2	148.7	124.0	348.5	372.1	331.8	198.9	69.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P317899  
 CATALOG NUMBER: GLEON-SA5D-827-U-T3R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1	5141.1
2.5°	5153.9	5162.7	5173.6	5161.8	5157.8	5142.1	5115.5	5109.6	5095.8	5096.8	5104.7
5°	5199.2	5213.9	5208.0	5162.7	5108.6	5032.8	4954.0	4887.1	4842.8	4839.8	4836.9
7.5°	5285.8	5295.6	5249.4	5120.4	4968.8	4793.6	4628.2	4483.4	4395.8	4374.2	4369.2
10°	5421.7	5419.7	5292.7	5032.8	4730.5	4417.5	4151.7	3950.8	3833.7	3799.2	3790.3
12.5°	5573.3	5550.6	5307.5	4873.3	4393.8	3959.7	3623.0	3399.5	3277.4	3238.0	3228.2
15°	5729.8	5673.7	5271.0	4635.0	3980.3	3466.4	3113.0	2906.3	2840.3	2818.6	2814.7
17.5°	5875.5	5767.2	5166.7	4312.1	3508.8	2975.2	2699.5	2616.8	2632.6	2661.1	2662.1
20°	6018.3	5830.2	4999.3	3904.5	3011.6	2570.5	2477.0	2538.1	2612.9	2671.0	2678.8
22.5°	6159.1	5874.5	4783.7	3434.0	2566.6	2343.1	2409.1	2520.3	2606.0	2669.0	2679.8
25°	6277.2	5885.4	4486.4	2931.9	2257.5	2257.5	2376.6	2481.9	2566.6	2628.6	2639.5
27.5°	6320.5	5812.5	4067.0	2467.2	2101.9	2218.1	2331.3	2418.9	2490.8	2556.8	2568.6
30°	6337.3	5677.6	3582.6	2094.0	2037.9	2175.8	2270.3	2345.1	2413.0	2475.0	2485.9
32.5°	6340.2	5515.2	3068.7	1882.4	1993.6	2131.5	2194.5	2260.4	2333.3	2357.9	2361.8
35°	6358.9	5323.2	2527.2	1774.1	1952.3	2090.1	2140.3	2187.6	2069.4	2078.3	2086.2
37.5°	6413.1	5133.2	2074.3	1713.0	1925.7	2068.4	2128.5	1957.2	1864.7	1843.0	1840.0
40°	6514.5	4930.4	1738.6	1663.8	1915.8	2079.3	2052.7	1827.2	1667.7	1548.6	1530.9
42.5°	6655.2	4711.8	1524.0	1631.3	1922.7	2131.5	1947.3	1702.2	1437.4	1360.6	1350.7
45°	6813.8	4482.4	1407.8	1608.7	1946.4	2171.8	1925.7	1535.8	1330.1	1272.0	1267.1
47.5°	6967.3	4201.9	1347.8	1598.8	1978.9	2139.3	1834.1	1484.6	1278.9	1248.4	1251.3
50°	7143.6	3948.8	1311.4	1588.0	2007.4	2118.7	1730.8	1458.1	1259.2	1296.6	1336.0
52.5°	7292.2	3687.0	1278.9	1566.3	2018.2	2082.2	1704.2	1463.0	1259.2	1331.0	1368.5
55°	7468.4	3489.1	1241.5	1521.1	1997.6	1978.9	1685.5	1492.5	1273.9	1228.7	1232.6
57.5°	7695.9	3424.1	1200.1	1450.2	1928.6	1828.2	1676.6	1521.1	1265.1	1236.5	1246.4
60°	8010.9	3493.0	1183.4	1357.6	1821.3	1710.1	1677.6	1506.3	1203.1	1153.8	1154.8
62.5°	8311.2	3569.8	1182.4	1299.5	1689.4	1604.7	1655.0	1458.1	1171.6	1143.0	1153.8
65°	8409.6	3492.0	1135.1	1234.6	1540.7	1478.7	1613.6	1406.9	1147.9	1104.6	1102.6
67.5°	8277.7	3250.8	1039.6	1129.2	1370.4	1332.0	1559.5	1345.8	1110.5	1075.1	1069.2
70°	7885.9	2712.3	921.5	990.4	1176.5	1166.6	1473.8	1274.9	1060.3	1029.8	1004.2
72.5°	6831.5	1932.6	776.8	824.0	957.9	989.4	1355.7	1182.4	989.4	923.5	884.1
75°	5610.7	1430.5	638.0	647.8	727.5	813.2	1193.2	1074.1	905.7	793.5	763.0
77.5°	3435.9	875.2	508.0	511.9	521.8	648.8	982.5	953.0	799.4	661.6	639.9
80°	1112.5	477.5	367.2	385.9	356.4	475.5	760.0	811.2	686.2	553.3	529.7
82.5°	423.3	278.6	248.1	260.9	247.1	319.0	554.3	649.8	562.2	454.8	370.2
85°	204.8	157.5	146.7	164.4	152.6	163.4	354.4	478.5	426.3	296.3	275.7
87.5°	72.9	69.9	56.1	75.8	65.0	58.1	108.3	241.2	281.6	203.8	182.1
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)