

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: P454158

Luminaire Tested: **GALN-SA5B-727-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454158
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5B-727-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24387 lumens
Efficiency: N/A
Efficacy: 119.5 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): 204
Input Voltage (V): NR
Input Current (A_{in}): 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

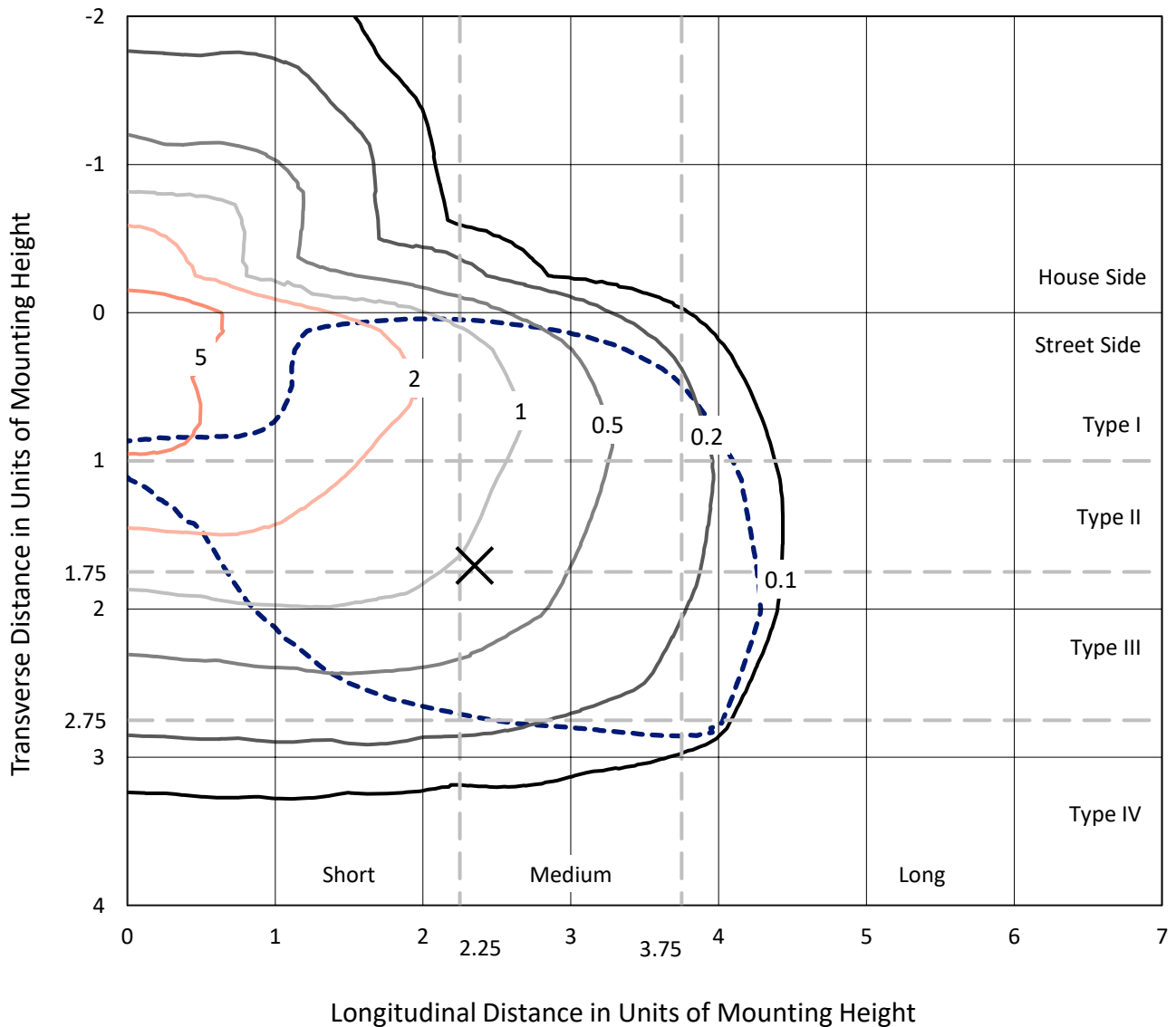




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Iso-Footcandle Lines of Horizontal Illumination

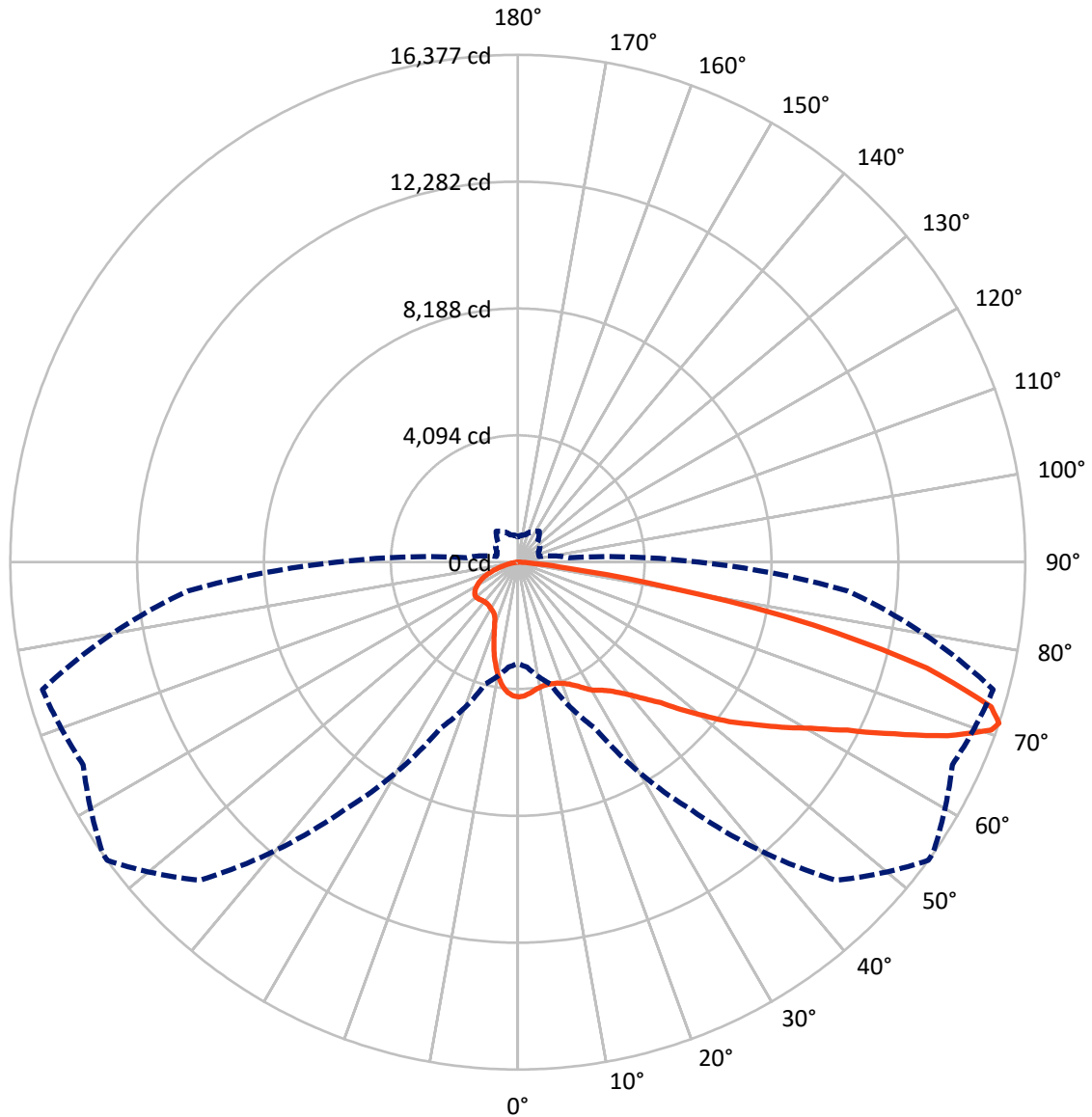
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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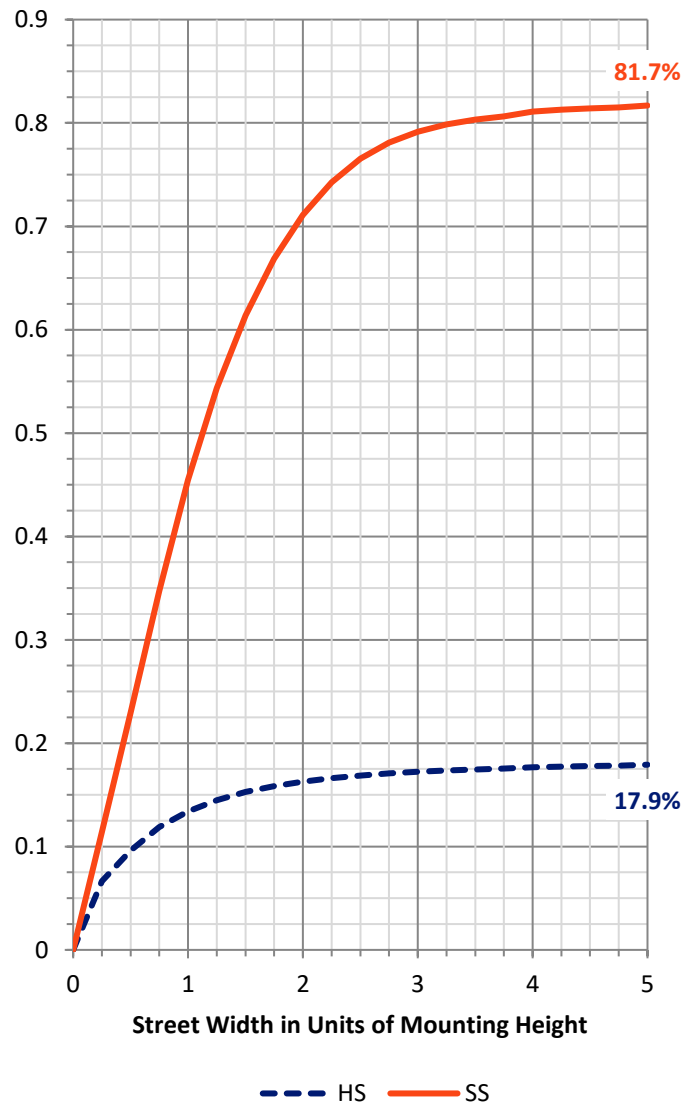
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4402.9	0.0	4402.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	19984.1	0.0	19984.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	24387.0	0.0	24387.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	387.7	1.6
10°-20°	1023.8	4.2
20°-30°	1704.7	7.0
30°-40°	2520.7	10.3
40°-50°	3550.5	14.6
50°-60°	4754.3	19.5
60°-70°	5992.4	24.6
70°-80°	4092.8	16.8
80°-90°	359.9	1.5
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°	24387.0	100.0
0°-180°	24387.0	100.0



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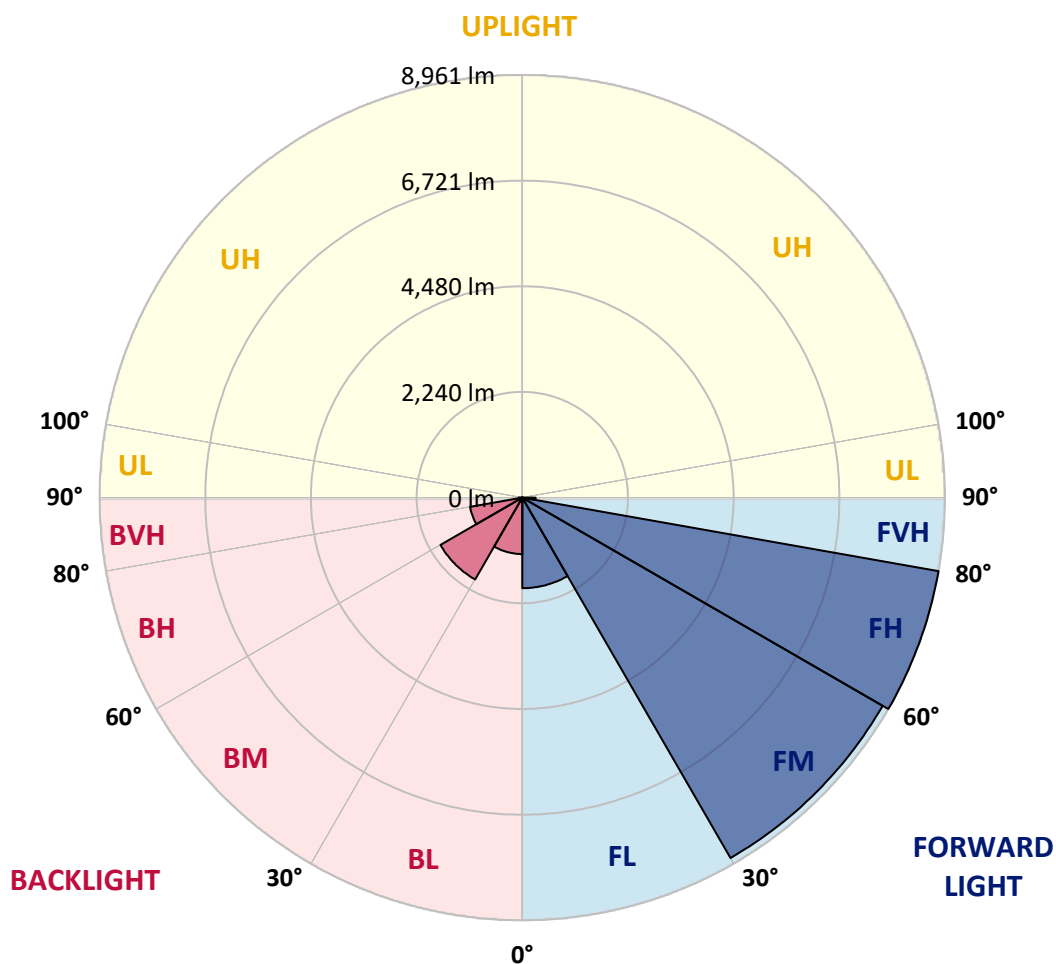
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1919.7	7.9			
FM	(30°-60°)	8822.3	36.2			
FH	(60°-80°)	8960.7	36.7			G4/12000
FVH	(80°-90°)	281.3	1.2			G3/500
BL	(0°-30°)	1196.6	4.9	B3/2500		
BM	(30°-60°)	2003.2	8.2	B2/2500		
BH	(60°-80°)	1124.5	4.6	B3/2500		G3/2500
BVH	(80°-90°)	78.6	0.3			G1/100
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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0
2.5°	4203.5	4223.2	4228.5	4241.7	4269.3	4291.7	4314.1	4311.5	4343.1	4356.3	4368.1
5°	4016.4	4021.7	4041.4	4067.8	4116.5	4178.4	4239.0	4240.3	4318.1	4380.0	4410.3
7.5°	3879.4	3896.5	3909.7	3937.4	3988.7	4055.9	4152.1	4160.0	4298.3	4420.8	4485.4
10°	3789.8	3809.6	3824.1	3858.3	3909.7	3984.8	4088.9	4103.4	4283.8	4485.4	4598.7
12.5°	3708.2	3727.9	3741.1	3785.9	3853.1	3945.3	4062.5	4079.6	4289.1	4560.5	4722.5
15°	3758.2	3774.0	3768.8	3781.9	3826.7	3932.1	4073.1	4090.2	4308.8	4632.9	4845.0
17.5°	3980.8	3994.0	3950.5	3900.5	3879.4	3957.1	4106.0	4124.4	4348.4	4708.0	4970.1
20°	4308.8	4344.4	4249.6	4137.6	4036.2	4046.7	4174.5	4194.2	4403.7	4783.1	5097.9
22.5°	4735.6	4762.0	4646.1	4461.7	4274.6	4178.4	4277.2	4289.1	4486.7	4880.6	5237.5
25°	5237.5	5253.3	5092.6	4855.5	4585.5	4403.7	4418.2	4439.3	4623.7	4991.2	5361.4
27.5°	5724.9	5775.0	5589.3	5299.4	4943.8	4640.8	4611.8	4625.0	4772.5	5053.1	5447.0
30°	6303.2	6299.3	6103.0	5767.1	5311.3	4899.0	4794.9	4792.3	4852.9	5083.4	5508.9
32.5°	6764.3	6818.3	6626.0	6259.8	5731.5	5166.4	4921.4	4916.1	4914.8	5136.1	5601.1
35°	7288.6	7296.5	7119.9	6751.1	6186.0	5502.3	5097.9	5071.6	5041.3	5249.4	5726.3
37.5°	7757.5	7794.4	7632.4	7218.7	6632.5	5851.4	5340.3	5323.2	5231.0	5445.7	5926.5
40°	8123.7	8151.4	8053.9	7660.0	7072.5	6228.1	5648.5	5616.9	5504.9	5767.1	6193.9
42.5°	8243.6	8300.2	8338.4	8144.8	7578.4	6674.7	6027.9	5988.4	5902.8	6254.5	6502.1
45°	8252.8	8342.4	8543.9	8553.2	8086.8	7209.5	6470.5	6442.9	6436.3	6878.9	6935.5
47.5°	8183.0	8273.9	8612.4	8795.5	8540.0	7749.6	7109.4	7065.9	7069.9	7650.8	7421.6
50°	8014.4	8122.4	8533.4	8951.0	8894.3	8310.8	7783.9	7769.4	7851.0	8532.1	7926.1
52.5°	7696.9	7827.3	8451.7	9048.5	9157.8	8794.2	8550.5	8509.7	8716.5	9488.4	8478.1
55°	6818.3	7014.6	8152.7	9102.5	9408.1	9256.6	9240.8	9314.5	9588.5	10531.7	9085.3
57.5°	6359.9	6507.4	7503.3	9111.7	9724.2	9794.0	10047.0	10065.4	10544.9	11639.6	9771.6
60°	6109.6	6240.0	7147.6	9051.1	10165.5	10459.3	10871.6	10937.4	11478.8	12839.6	10483.0
62.5°	5890.9	6002.9	6934.2	8841.6	10663.4	11445.9	11939.9	11971.5	12539.3	14164.8	11185.1
65°	5375.9	5503.6	6504.8	8632.2	11092.9	12678.9	13357.3	13320.4	13668.2	15308.2	11625.1
67.5°	4681.6	4843.7	5702.5	7909.0	11305.0	14026.5	14953.9	14907.7	14782.6	16057.7	11751.5
70°	3795.1	3882.0	4676.4	6658.9	10457.9	14733.9	16214.5	16165.8	15472.9	16156.5	11153.5
71°	3265.6	3401.2	4071.7	5914.6	9753.2	14517.8	16376.5	16363.4	15474.2	15883.9	10703.0
72.5°	2549.0	2631.9	3224.7	4582.8	8289.7	13290.1	15976.1	16026.1	15138.3	15126.4	9774.3
75°	1612.4	1649.2	2023.4	2697.8	4548.6	9412.0	13637.9	13773.6	13441.6	12381.2	7268.8
77.5°	936.6	984.0	1211.9	1590.0	1965.4	5108.4	9758.5	9906.0	9339.6	6817.0	2975.8
80°	545.4	598.0	798.3	923.4	902.3	1895.6	4968.8	5220.4	4044.1	1721.7	835.2
82.5°	303.0	338.5	561.2	562.5	480.8	619.1	1563.6	1636.1	1153.9	694.2	341.2
85°	220.0	249.0	362.3	328.0	230.5	266.1	544.0	570.4	466.3	292.4	110.7
87.5°	77.7	110.7	198.9	158.1	63.2	55.3	156.8	127.8	118.6	81.7	25.0
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°	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0	4351.0
2.5°	4374.7	4377.3	4364.2	4340.5	4316.8	4286.5	4252.2	4225.9	4214.0	4212.7	4211.4
5°	4422.1	4428.7	4378.7	4304.9	4223.2	4123.1	4037.5	3940.0	3915.0	3875.5	3887.3
7.5°	4498.5	4494.6	4395.8	4239.0	4048.0	3835.9	3656.8	3552.7	3444.7	3414.4	3415.7
10°	4607.9	4582.8	4395.8	4104.7	3785.9	3471.1	3220.8	3062.7	2977.1	2905.9	2879.6
12.5°	4723.8	4660.6	4353.6	3916.3	3448.7	3062.7	2794.0	2580.6	2525.2	2467.3	2468.6
15°	4834.4	4729.1	4270.6	3651.5	3085.1	2626.7	2365.8	2238.1	2220.9	2227.5	2226.2
17.5°	4934.6	4777.8	4144.2	3356.4	2660.9	2252.6	2114.2	2123.5	2169.6	2202.5	2206.5
20°	5036.0	4806.8	3955.8	2961.3	2260.5	2026.0	2031.3	2103.7	2173.5	2218.3	2224.9
22.5°	5132.2	4820.0	3734.5	2579.2	1970.7	1929.8	2007.5	2085.3	2153.8	2197.2	2203.8
25°	5195.4	4789.7	3421.0	2180.1	1828.4	1895.6	1977.2	2043.1	2101.1	2145.9	2156.4
27.5°	5212.5	4692.2	3032.4	1857.4	1762.5	1862.6	1937.7	1986.5	2031.3	2073.4	2081.3
30°	5203.3	4548.6	2605.6	1667.7	1724.3	1824.4	1882.4	1918.0	1972.0	2004.9	2011.5
32.5°	5188.8	4381.3	2160.4	1566.3	1692.7	1788.9	1823.1	1854.7	1853.4	1840.3	1849.5
35°	5194.1	4181.1	1799.4	1505.7	1665.1	1762.5	1791.5	1752.0	1638.7	1633.4	1628.2
37.5°	5221.7	3983.5	1537.3	1463.5	1650.6	1758.6	1774.4	1592.6	1492.5	1446.4	1434.5
40°	5292.9	3753.0	1364.7	1431.9	1649.2	1788.9	1696.7	1512.2	1319.9	1230.3	1223.8
42.5°	5387.7	3526.4	1259.3	1412.1	1665.1	1835.0	1665.1	1399.0	1189.5	1136.8	1128.9
45°	5528.7	3266.9	1201.4	1402.9	1688.8	1852.1	1654.5	1316.0	1136.8	1094.7	1094.7
47.5°	5688.0	3019.2	1169.8	1396.3	1719.1	1840.3	1561.0	1289.6	1111.8	1117.1	1142.1
50°	5846.1	2804.5	1146.0	1381.8	1745.4	1833.7	1522.8	1288.3	1118.4	1185.6	1230.3
52.5°	6029.2	2653.0	1117.1	1358.1	1745.4	1791.5	1510.9	1314.7	1136.8	1156.6	1176.3
55°	6250.5	2605.6	1080.2	1306.7	1713.8	1686.1	1504.3	1352.9	1150.0	1103.9	1111.8
57.5°	6543.0	2682.0	1044.6	1242.2	1641.3	1576.8	1501.7	1363.4	1119.7	1081.5	1073.6
60°	6882.8	2833.5	1034.1	1176.3	1542.5	1483.3	1485.9	1333.1	1077.5	1038.0	1044.6
62.5°	7121.3	2924.4	1027.5	1126.3	1434.5	1380.5	1447.7	1296.2	1059.1	1024.8	1031.4
65°	7121.3	2813.7	966.9	1049.9	1294.9	1256.7	1401.6	1250.1	1035.4	995.9	989.3
67.5°	6851.2	2491.0	874.7	935.3	1140.8	1115.7	1337.0	1194.8	999.8	969.5	953.7
70°	6147.8	1889.0	758.8	800.9	945.8	968.2	1254.1	1119.7	940.5	903.7	879.9
71°	5838.2	1645.3	710.0	732.4	870.7	903.7	1214.5	1088.1	914.2	861.5	819.4
72.5°	5241.5	1385.8	636.3	645.5	744.3	803.5	1131.6	1027.5	864.1	789.1	741.6
75°	3982.2	1011.7	512.4	507.2	550.6	637.6	957.7	915.5	757.4	656.0	628.3
77.5°	1720.4	550.6	383.3	387.3	374.1	483.4	753.5	786.4	649.4	533.5	508.5
80°	521.6	317.5	262.1	267.4	250.3	324.1	530.9	616.5	521.6	414.9	380.7
82.5°	267.4	189.7	179.2	176.5	159.4	183.1	321.4	421.5	372.8	259.5	229.2
85°	115.9	101.4	88.3	85.6	75.1	65.9	114.6	210.8	197.6	144.9	138.3
87.5°	29.0	26.3	17.1	15.8	9.2	1.3	0.0	0.0	0.0	0.0	0.0
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)