

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: P651421

Luminaire Tested: **GALN-SA5D-840-U-T3-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-840-U-T3-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19456.5 lumens  
Efficiency: N/A  
Efficacy: 63.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G1

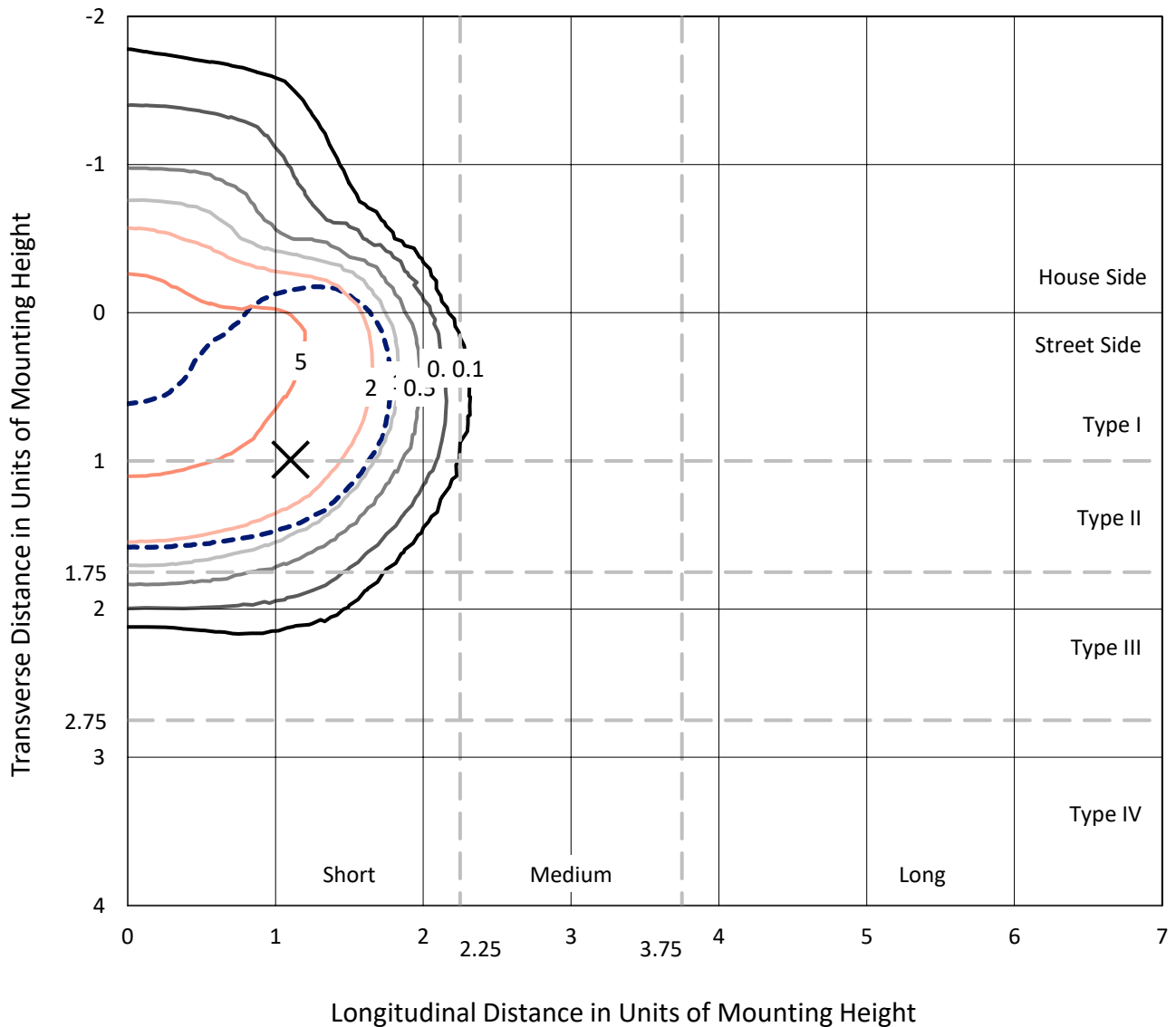
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

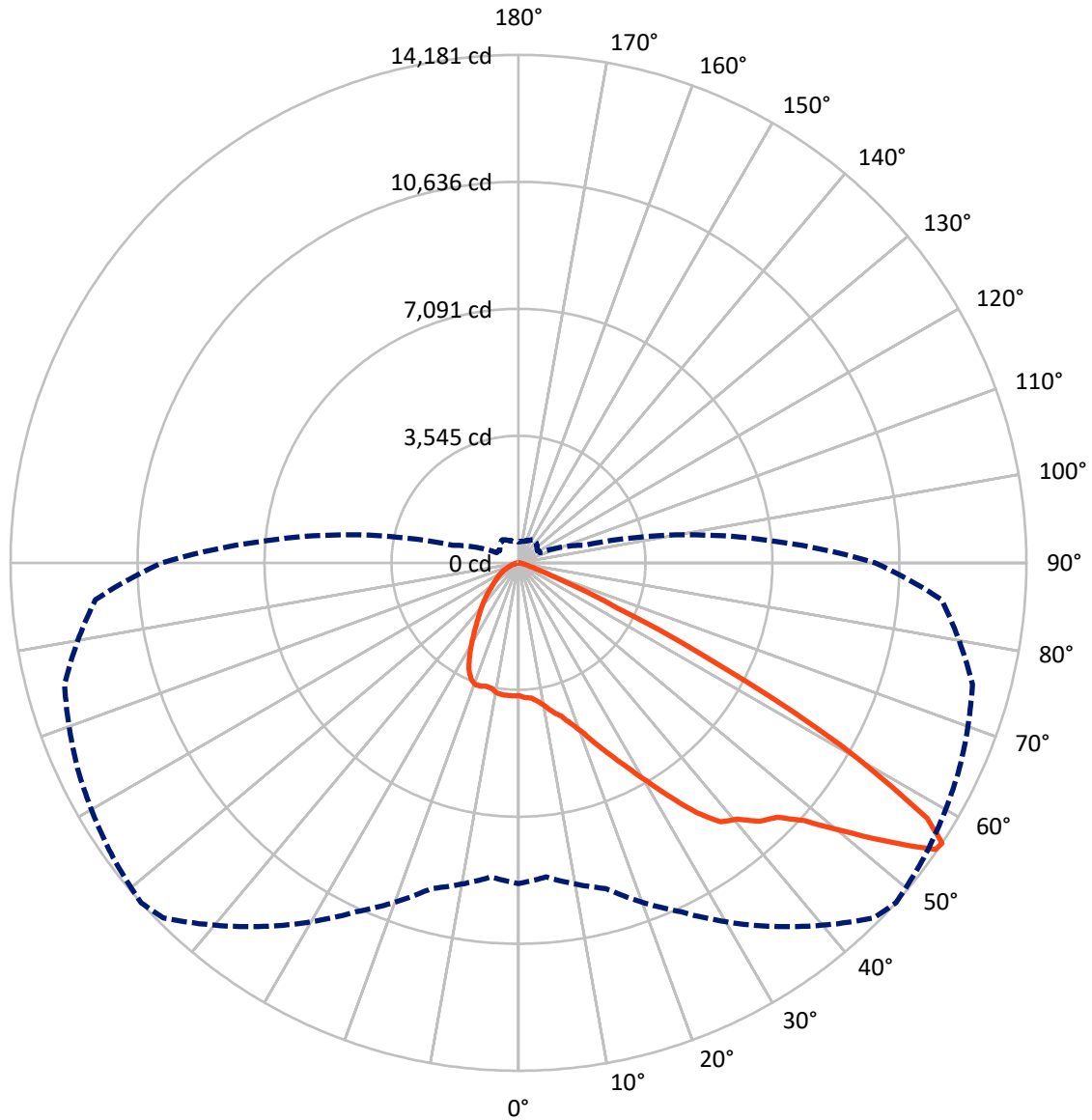
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

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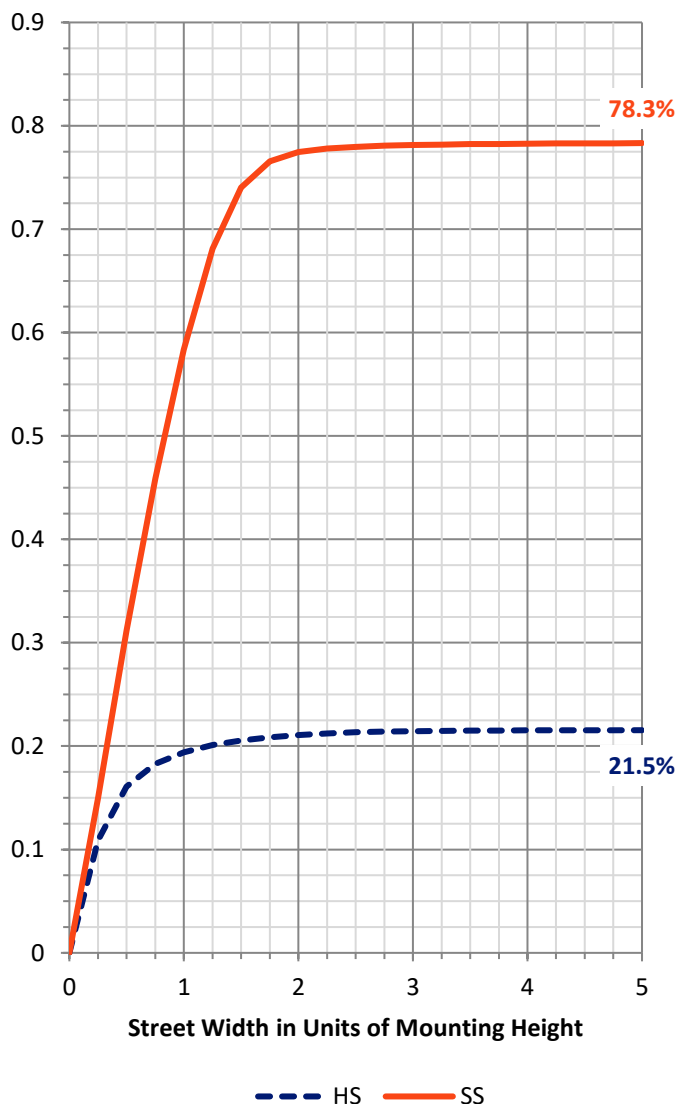
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4231.4	0.0	4231.4
	% Fixture	21.7	0.0	21.7
<b>Street Side</b>	Lumens	15225.1	0.0	15225.1
	% Fixture	78.3	0.0	78.3
<b>Total</b>	Lumens	19456.5	0.0	19456.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	362.0	1.9
10°-20°	1156.9	5.9
20°-30°	2098.4	10.8
30°-40°	3296.1	16.9
40°-50°	4808.4	24.7
50°-60°	5793.2	29.8
60°-70°	1696.2	8.7
70°-80°	215.2	1.1
80°-90°	30.2	0.2
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°	19456.5	100.0
0°-180°	19456.5	100.0

**Coefficient of Utilization**



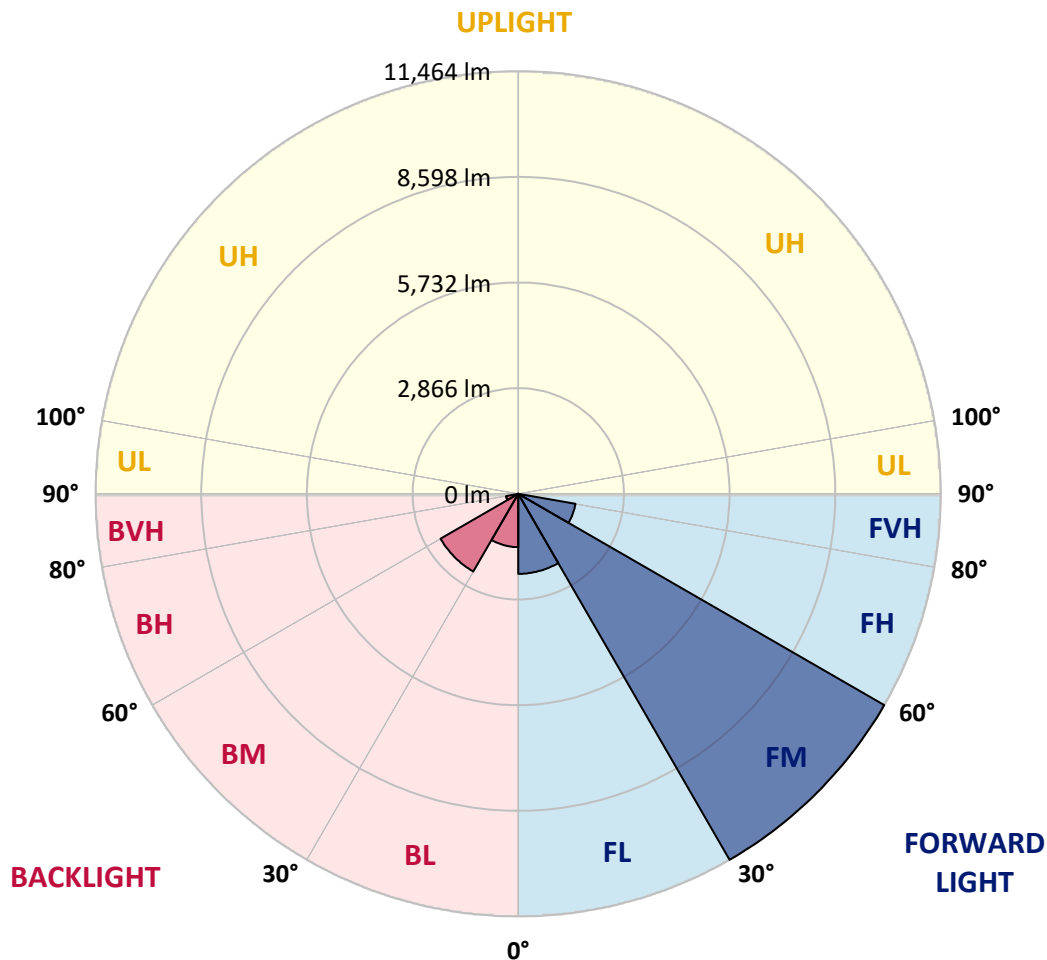
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2171.0	11.2			
FM (30°-60°)	11463.8	58.9			
FH (60°-80°)	1575.2	8.1			G1/1800
FVH (80°-90°)	15.1	0.1			G1/100
BL (0°-30°)	1446.3	7.4	B3/2500		
BM (30°-60°)	2433.9	12.5	B2/2500		
BH (60°-80°)	336.2	1.7	B1/500		G1/500
BVH (80°-90°)	15.0	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	48°	55°	65°	75°	85°
0°	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2
2.5°	3783.5	3765.8	3765.8	3737.5	3769.4	3755.1	3765.8	3730.3	3765.8	3712.7	3755.1
5°	3801.2	3804.8	3790.6	3808.3	3808.3	3829.6	3794.2	3826.0	3843.7	3804.8	3787.0
7.5°	3893.3	3900.4	3896.9	3882.7	3911.1	3907.5	3904.0	3879.2	3886.3	3872.0	3850.9
10°	4074.0	4070.4	4088.2	4052.8	4031.5	4056.3	4063.4	4024.4	3996.1	3985.4	3918.1
12.5°	4336.2	4293.6	4268.8	4233.4	4244.0	4208.6	4272.4	4205.1	4191.0	4127.1	4059.8
15°	4548.7	4541.7	4545.2	4488.5	4424.8	4438.9	4438.9	4403.5	4382.2	4304.3	4208.6
17.5°	4984.4	4835.7	4867.5	4796.7	4743.6	4740.0	4708.2	4715.2	4658.6	4495.6	4350.3
20°	5324.5	5260.8	5211.2	5090.7	5009.2	5034.1	5019.9	4984.4	4966.8	4754.2	4548.7
22.5°	5629.2	5650.5	5569.0	5537.1	5423.8	5434.4	5462.7	5430.8	5296.2	5076.6	4771.9
25°	6057.9	6033.1	5923.2	5884.3	5778.0	5816.9	5926.8	5902.0	5816.9	5420.2	4945.5
27.5°	6564.5	6479.5	6500.7	6323.6	6220.9	6330.6	6461.7	6585.7	6344.8	5824.1	5151.0
30°	6922.3	6833.7	6826.6	6819.5	6794.8	6922.3	7074.6	7187.9	6993.2	6227.9	5491.1
32.5°	7099.4	7120.7	7180.9	7159.6	7375.7	7637.9	7797.3	7960.2	7715.8	6886.9	5941.0
35°	7570.6	7436.0	7570.6	7584.7	7807.9	8364.1	8566.1	8955.7	8895.5	7818.5	6490.1
37.5°	7846.9	7836.3	7854.0	7988.6	8204.7	8892.0	9178.9	9480.1	9366.7	8378.3	7173.8
40°	8303.9	8332.2	8328.7	8431.4	8668.8	9288.8	9405.7	9650.1	9660.7	9154.1	8179.9
42.5°	9037.2	8923.9	8849.4	8955.7	9288.8	9632.4	9866.2	9816.6	10167.4	10096.5	9472.9
45°	9696.1	9763.4	9653.7	9830.8	9951.2	10135.4	10128.3	10234.6	10681.0	11017.5	10447.2
47.5°	10312.6	10355.1	10408.2	10528.6	10790.8	10819.1	10758.9	10712.9	11329.3	11676.4	11201.8
50°	10681.0	10720.0	10968.0	11184.0	11672.9	11736.7	11772.1	11655.3	12073.2	12112.3	11913.9
52.5°	10581.8	10624.4	10971.5	11683.6	12462.9	13047.4	12941.2	12742.8	12718.0	12870.3	12572.8
55°	9703.2	9664.3	10142.5	11251.3	12710.9	14113.8	14128.0	13919.0	13518.7	13415.9	12473.5
56°	8955.7	8803.4	9412.7	10751.8	12392.1	14021.7	14181.1	13957.9	13582.4	13121.9	11860.7
57.5°	7336.8	7482.0	8087.8	9196.7	11290.3	13359.2	13451.3	13398.2	13114.8	12342.5	10436.6
60°	4045.6	4300.7	4835.7	6192.5	8038.2	10252.4	10326.7	10758.9	10812.1	9451.7	7180.9
62.5°	1718.2	1689.8	2246.1	3245.0	4577.1	6188.9	6327.1	6770.0	6851.5	5448.6	3602.8
65°	697.9	736.9	1016.8	1633.1	2419.6	2820.0	3014.7	3160.1	3429.3	2249.6	1328.4
67.5°	460.5	457.0	598.7	931.7	1303.7	1257.6	1257.6	1328.4	1229.3	917.5	573.9
70°	329.5	340.1	428.7	644.8	811.2	602.2	577.4	552.6	627.0	605.8	464.1
72.5°	216.1	230.3	286.9	386.2	421.6	329.5	329.5	396.8	517.2	488.9	379.0
75°	141.7	145.2	177.1	223.2	209.0	170.1	187.8	265.7	375.5	361.4	269.2
77.5°	95.6	99.2	120.4	145.2	116.9	95.6	102.8	134.6	184.2	184.2	141.7
80°	35.4	38.9	49.6	46.1	53.2	67.3	74.4	92.1	109.8	109.8	95.6
82.5°	0.0	3.5	10.6	24.8	38.9	53.2	60.2	70.8	81.5	92.1	88.6
85°	0.0	3.5	10.6	17.7	28.3	31.9	35.4	24.8	21.3	21.3	17.7
87.5°	0.0	0.0	3.5	3.5	3.5	3.5	3.5	3.5	7.1	3.5	3.5
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°	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2	3716.2
2.5°	3716.2	3712.7	3712.7	3702.0	3723.3	3712.7	3719.7	3716.2	3670.1	3705.6	3680.8
5°	3755.1	3780.0	3741.0	3734.0	3705.6	3716.2	3716.2	3680.8	3712.7	3709.1	3702.0
7.5°	3854.4	3811.8	3769.4	3726.8	3719.7	3709.1	3670.1	3656.0	3680.8	3652.5	3694.9
10°	3896.9	3904.0	3840.2	3783.5	3730.3	3656.0	3602.8	3571.0	3532.0	3574.5	3599.3
12.5°	4091.7	4020.9	3911.1	3822.5	3641.8	3567.4	3514.3	3500.1	3567.4	3581.6	3556.8
15°	4159.0	4148.4	4006.7	3808.3	3620.6	3532.0	3542.6	3514.3	3521.4	3485.9	3493.0
17.5°	4297.2	4176.7	4010.2	3762.3	3617.0	3595.8	3532.0	3418.7	3354.8	3326.5	3351.3
20°	4449.6	4332.7	4091.7	3780.0	3648.9	3592.2	3383.2	3245.0	3114.0	3043.1	3046.7
22.5°	4584.1	4438.9	4056.3	3787.0	3677.3	3443.4	3191.9	2919.1	2756.1	2646.4	2649.9
25°	4747.1	4541.7	4070.4	3801.2	3602.8	3206.1	2844.7	2579.0	2384.2	2309.8	2334.6
27.5°	4839.2	4605.4	4148.4	3833.1	3408.0	2869.5	2479.9	2231.8	2118.5	2083.1	2079.5
30°	5115.6	4747.1	4244.0	3769.4	3082.1	2508.2	2146.8	1994.5	1884.7	1852.8	1859.9
32.5°	5526.5	5005.7	4368.1	3602.8	2749.1	2185.8	1930.8	1817.4	1714.6	1654.4	1647.4
35°	5870.1	5448.6	4499.1	3344.2	2363.0	1937.8	1778.4	1636.7	1480.8	1413.5	1395.8
37.5°	6525.5	5948.1	4470.8	2954.5	1994.5	1753.6	1615.4	1441.8	1307.3	1215.1	1204.5
40°	7397.0	6532.6	4332.7	2479.9	1721.7	1590.7	1441.8	1275.4	1108.9	1030.9	1023.8
42.5°	8456.3	7248.2	4081.1	1998.0	1449.0	1427.7	1293.0	1101.8	952.9	896.3	899.8
45°	9317.1	7861.1	3826.0	1604.8	1247.0	1268.2	1151.3	970.7	867.9	821.9	821.9
47.5°	10082.3	8275.5	3549.7	1324.9	1059.2	1108.9	1006.1	899.8	811.2	775.8	768.8
50°	10819.1	8697.1	3273.3	1073.5	903.4	952.9	942.3	857.3	786.5	743.9	747.5
52.5°	11279.7	8764.4	2922.6	878.6	790.0	846.7	882.1	804.2	726.2	701.5	694.3
55°	10716.4	7896.5	2267.3	722.7	669.5	743.9	811.2	722.7	662.5	620.0	616.5
56°	9958.3	7060.4	1895.3	666.0	634.1	715.6	786.5	690.8	623.5	598.7	581.0
57.5°	8431.4	5778.0	1399.3	591.6	588.1	666.0	747.5	658.9	581.0	559.8	559.8
60°	5257.3	3252.1	846.7	495.9	510.2	591.6	673.1	588.1	517.2	517.2	527.8
62.5°	2394.8	1353.3	513.7	421.6	439.3	510.2	598.7	531.4	492.4	531.4	538.5
65°	814.8	584.5	372.0	336.6	347.2	421.6	513.7	538.5	535.0	559.8	573.9
67.5°	457.0	375.5	311.8	279.9	272.8	311.8	421.6	538.5	517.2	506.6	513.7
70°	386.2	318.8	276.4	248.0	237.3	251.5	325.9	407.4	364.9	354.2	347.2
72.5°	311.8	265.7	240.9	223.2	191.3	163.0	148.8	155.8	173.6	184.2	201.9
75°	219.7	201.9	201.9	180.6	138.2	102.8	81.5	67.3	46.1	31.9	35.4
77.5°	124.0	124.0	127.5	109.8	88.6	67.3	49.6	35.4	17.7	7.1	3.5
80°	85.0	92.1	99.2	88.6	74.4	60.2	42.5	24.8	10.6	0.0	0.0
82.5°	85.0	95.6	102.8	88.6	74.4	56.7	42.5	24.8	10.6	3.5	0.0
85°	17.7	21.3	24.8	28.3	42.5	42.5	31.9	21.3	10.6	3.5	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	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)