

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: P651277

Luminaire Tested: **GALN-SA3D-840-U-AFL-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651277  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA3D-840-U-AFL-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14488.7 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G0

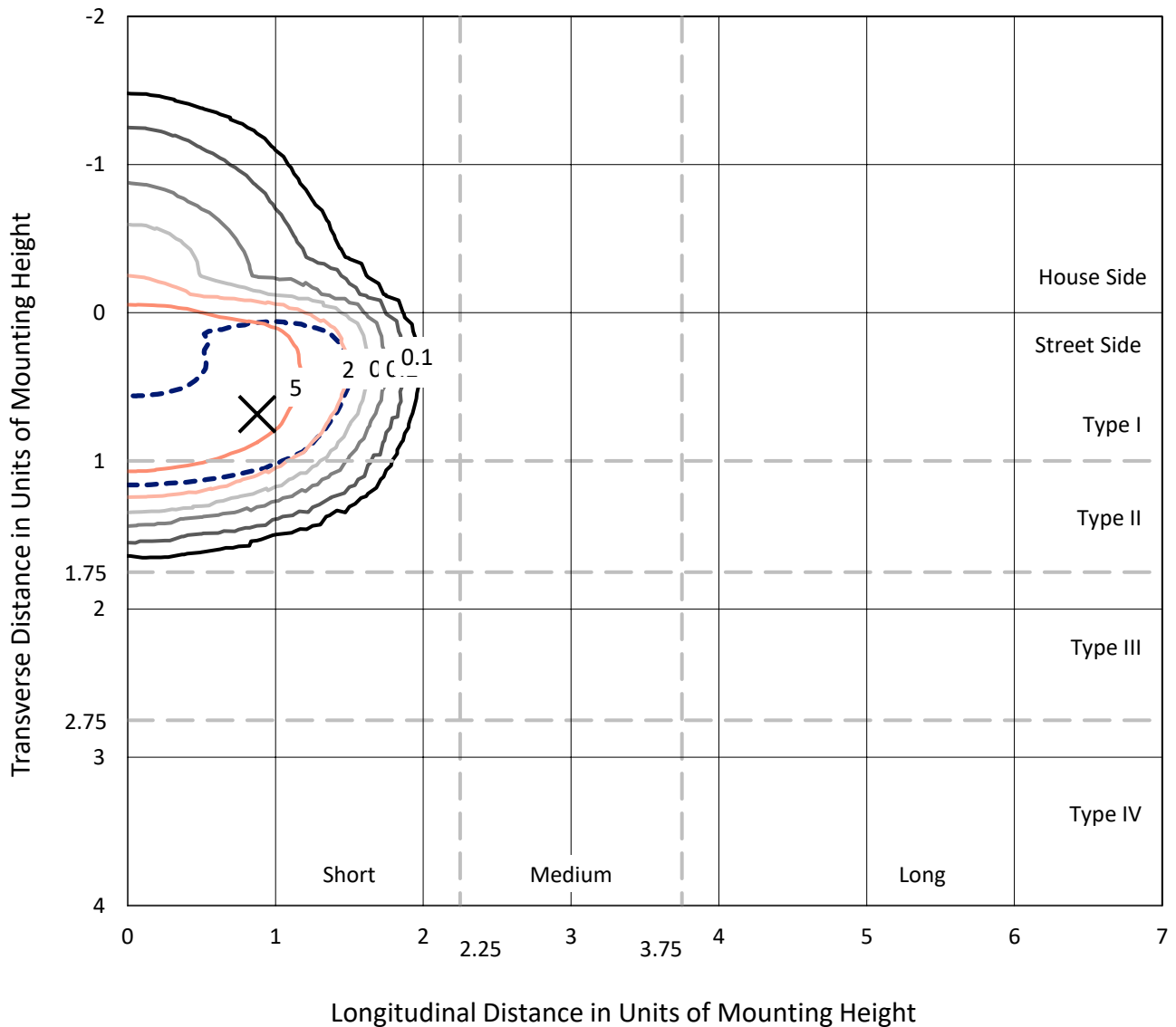
Input Watts (W): 184  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

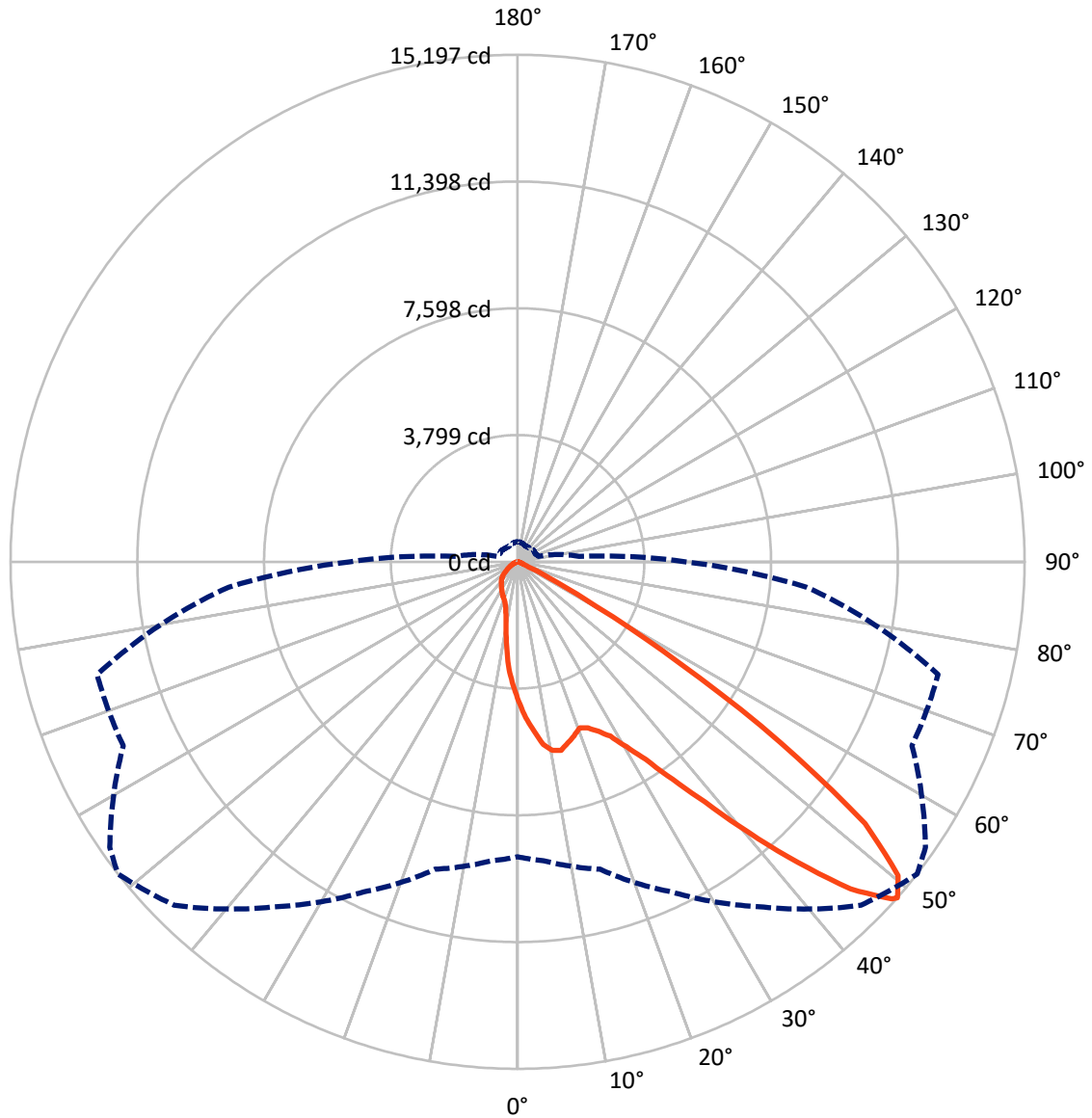
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral      - - - Horizontal Cone Through 48-Deg Vertical

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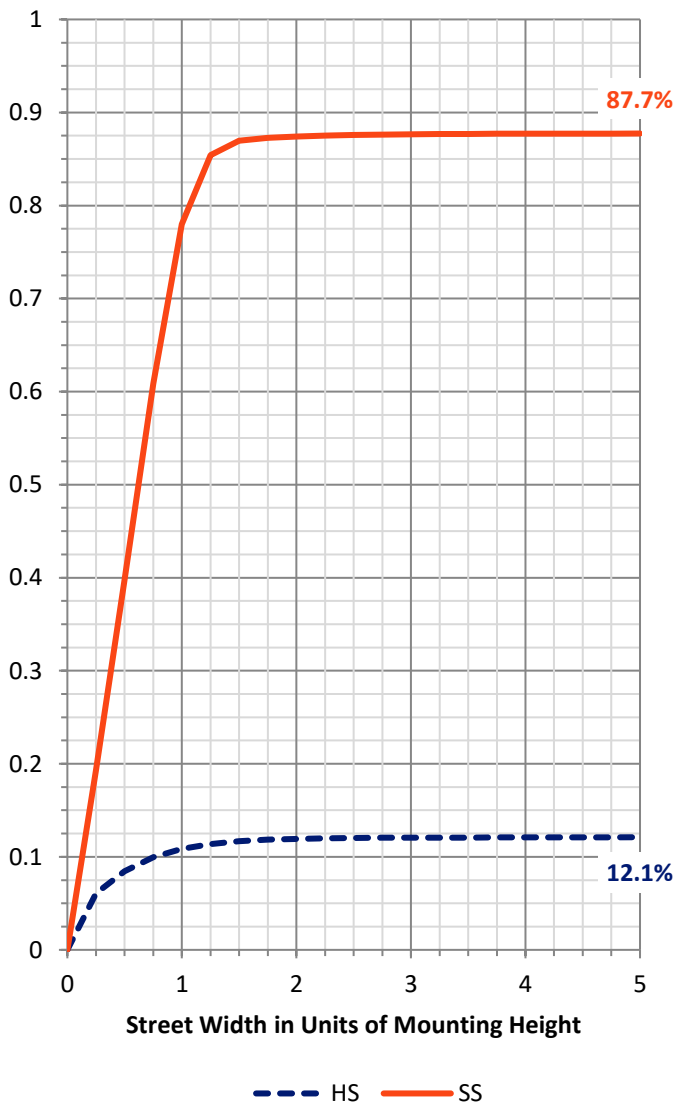
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1764.1	0.0	1764.1
	% Fixture	12.2	0.0	12.2
<b>Street Side</b>	Lumens	12724.6	0.0	12724.6
	% Fixture	87.8	0.0	87.8
<b>Total</b>	Lumens	14488.7	0.0	14488.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	383.0	2.6
10°-20°	1000.8	6.9
20°-30°	1708.8	11.8
30°-40°	3146.8	21.7
40°-50°	4887.0	33.7
50°-60°	2941.1	20.3
60°-70°	340.2	2.3
70°-80°	65.8	0.5
80°-90°	15.2	0.1
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°	14488.7	100.0
0°-180°	14488.7	100.0

**Coefficient of Utilization**



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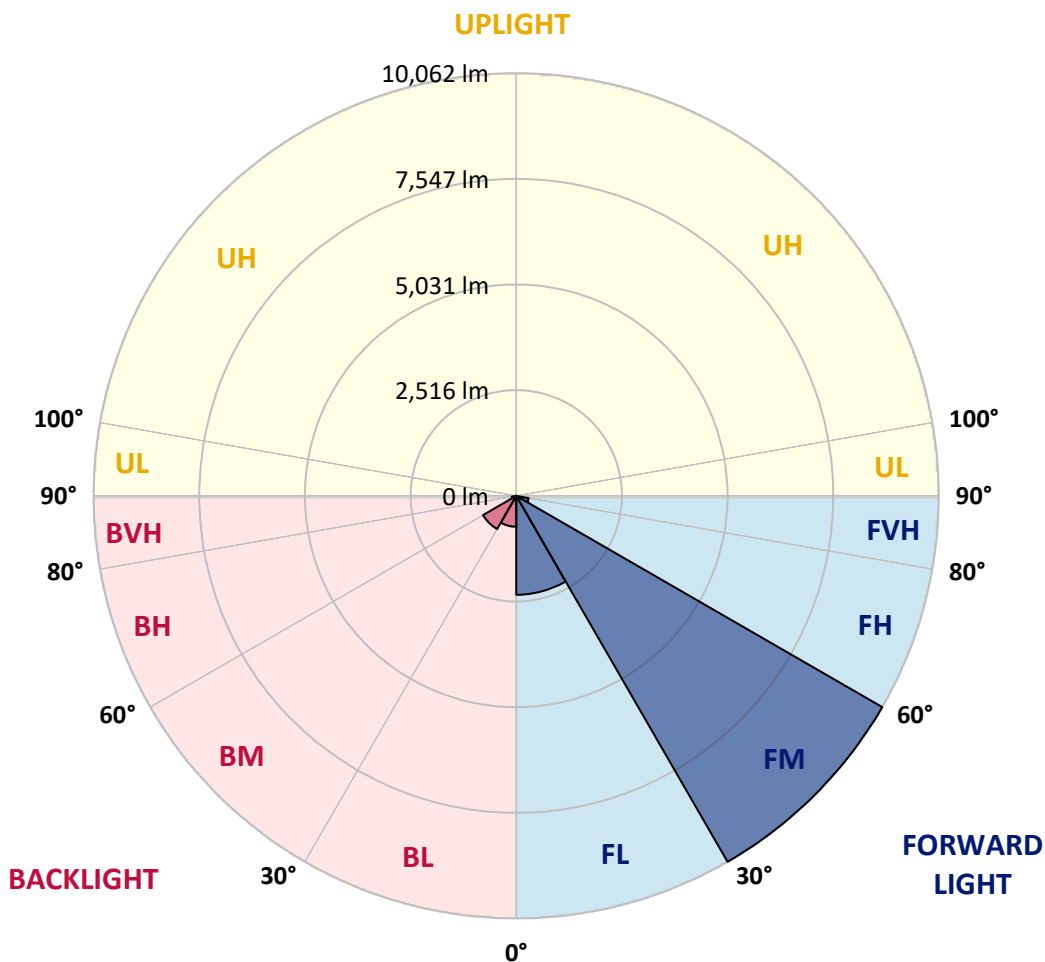
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2355.7	16.3			
FM (30°-60°)	10062.1	69.4			
FH (60°-80°)	299.5	2.1			G0/660
FVH (80°-90°)	7.2	0.0			G0/10
BL (0°-30°)	736.9	5.1	B2/1000		
BM (30°-60°)	912.7	6.3	B1/1000		
BH (60°-80°)	106.5	0.7	B0/110		G0/110
BVH (80°-90°)	8.0	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G0**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	52°	55°	65°	75°	85°
0°	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1
2.5°	5071.2	4955.0	4965.6	4889.6	4845.2	4773.4	4676.2	4657.2	4551.7	4408.0	4262.3
5°	5527.4	5500.0	5535.9	5426.0	5430.3	5312.0	5083.8	5088.1	4845.2	4610.8	4384.7
7.5°	5557.0	5493.7	5529.5	5626.7	5683.7	5662.6	5533.8	5421.8	5191.6	4847.4	4517.9
10°	4976.1	5096.5	5134.6	5295.1	5523.2	5764.0	5749.2	5755.6	5563.3	5113.4	4631.9
12.5°	4627.7	4547.4	4676.2	4773.4	5117.7	5584.4	5797.8	5844.3	5859.0	5371.1	4745.9
15°	4469.2	4469.2	4490.4	4517.9	4767.0	5198.0	5633.0	5768.2	6087.2	5709.0	4925.5
17.5°	4568.5	4564.3	4593.9	4536.9	4629.8	4961.4	5481.0	5635.1	6342.7	6040.7	5066.9
20°	4870.6	4885.4	4866.4	4701.6	4707.9	4957.1	5312.0	5554.9	6515.9	6327.9	5255.0
22.5°	5290.9	5299.3	5191.6	5012.0	4959.3	5081.7	5409.1	5595.0	6655.3	6672.2	5312.0
25°	5776.7	5742.9	5721.7	5468.3	5307.7	5413.3	5628.8	5736.5	6741.9	6967.9	5474.6
27.5°	6450.4	6382.9	6254.0	6028.0	5909.7	5759.8	5913.9	6091.4	6989.0	7381.9	5652.0
30°	7445.2	7386.1	7134.7	6843.3	6532.8	6385.0	6433.5	6530.7	7434.7	7861.3	5886.5
32.5°	8942.7	8818.1	8454.8	7899.3	7476.9	7069.3	7056.6	7160.1	7833.8	8524.5	6165.3
35°	10592.3	10554.3	10019.9	9447.5	8630.1	8000.7	8011.3	8066.2	8598.5	9394.7	6530.7
37.5°	11688.5	11897.5	11557.5	10942.9	10256.4	9356.7	9128.6	9147.6	9648.2	10425.5	7189.6
40°	12535.4	12358.0	12398.1	12254.5	11785.6	11173.1	10668.3	10569.0	10862.6	11565.9	7844.4
42.5°	12165.8	12174.2	12421.4	12761.4	12877.6	12833.2	12317.9	12129.9	11901.8	12499.5	8467.5
45°	11122.4	11340.0	11661.1	12560.8	13350.7	14092.0	13990.7	13678.1	12619.9	13238.8	8826.5
47.5°	9458.1	9449.6	9975.5	11145.7	12900.9	14637.0	15097.5	14877.8	13128.9	13156.4	8752.6
48°	8843.5	8995.5	9538.4	10915.4	12615.7	14556.7	15196.7	14920.0	13042.3	13046.6	8689.3
50°	6537.0	6509.6	7185.4	8875.2	11268.1	13678.1	14778.5	14993.9	13040.2	12491.0	8245.8
52.5°	3453.3	3571.6	4063.7	5580.2	7966.9	11194.2	13036.0	13371.8	12579.8	11582.8	7607.9
55°	1467.9	1326.4	1704.5	2519.7	4481.9	7479.0	9563.7	10311.3	10636.6	10250.1	6655.3
57.5°	523.8	572.4	659.0	948.3	1884.0	4093.3	5702.7	6283.5	7369.2	7521.2	4534.8
60°	335.8	342.2	369.6	435.1	707.5	1577.7	2705.7	3168.2	3660.3	3778.6	2116.4
62.5°	259.8	261.9	274.6	285.1	335.8	612.5	1015.9	1203.9	1250.4	1075.1	555.5
65°	217.6	219.7	223.9	223.9	238.7	287.3	354.8	390.7	380.2	375.9	314.7
67.5°	166.9	171.1	179.6	179.6	188.0	175.3	196.5	209.1	236.6	287.3	268.3
70°	130.9	133.0	139.4	143.6	143.6	126.7	141.5	154.2	173.2	213.4	211.2
72.5°	101.3	105.6	109.8	109.8	103.5	86.6	101.3	111.9	124.6	147.8	143.6
75°	78.1	78.1	80.2	65.5	50.7	44.3	61.2	73.9	92.9	97.1	80.2
77.5°	21.1	23.2	21.1	19.0	21.1	31.7	40.1	46.5	59.1	59.1	52.8
80°	0.0	2.1	6.3	12.7	21.1	29.6	35.9	40.1	46.5	50.7	48.6
82.5°	0.0	2.1	6.3	12.7	19.0	23.2	31.7	33.8	38.0	44.3	44.3
85°	0.0	2.1	4.2	8.4	12.7	14.8	14.8	12.7	12.7	10.6	8.4
87.5°	0.0	0.0	2.1	4.2	4.2	6.3	6.3	6.3	6.3	6.3	6.3
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°	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1	4184.1
2.5°	4205.3	4139.7	4040.5	3884.2	3734.2	3637.1	3544.1	3440.6	3383.6	3379.4	3347.7
5°	4255.9	4108.0	3871.5	3603.3	3316.1	3068.9	2819.7	2657.1	2511.3	2431.1	2416.3
7.5°	4283.4	4091.2	3708.9	3259.0	2769.0	2365.6	2086.8	1881.9	1801.7	1742.5	1740.4
10°	4340.4	4061.6	3466.0	2802.8	2196.6	1789.0	1596.7	1503.8	1459.5	1442.6	1417.3
12.5°	4382.6	4006.7	3216.7	2333.9	1736.2	1482.7	1398.2	1377.1	1379.2	1387.6	1377.1
15°	4441.8	3958.1	2880.9	1915.7	1457.4	1334.8	1334.8	1339.1	1368.6	1372.8	1370.7
17.5°	4437.5	3863.0	2534.5	1577.7	1288.4	1271.5	1277.8	1317.9	1336.9	1343.3	1328.5
20°	4488.2	3774.3	2177.6	1347.5	1193.4	1218.7	1260.9	1271.5	1294.7	1298.9	1282.0
22.5°	4473.4	3552.6	1846.0	1165.9	1121.6	1170.1	1212.4	1225.0	1218.7	1206.0	1203.9
25°	4446.0	3362.5	1541.9	1045.5	1068.7	1121.6	1161.7	1138.5	1125.8	1127.9	1130.0
27.5°	4397.4	3121.7	1290.5	961.0	996.9	1075.1	1072.9	1064.5	1077.2	1066.6	1077.2
30°	4389.0	2880.9	1083.5	885.0	944.1	1001.1	1005.3	1020.1	1034.9	1015.9	1034.9
32.5°	4401.6	2616.9	935.7	838.5	912.4	914.6	961.0	975.8	965.2	923.0	927.2
35°	4498.8	2414.2	828.0	813.2	861.8	863.9	908.2	889.2	842.8	817.4	832.2
37.5°	4703.7	2245.2	777.3	790.0	794.2	821.6	823.8	785.7	790.0	787.8	796.3
40°	4965.6	2116.4	741.3	768.8	764.6	783.6	707.5	728.6	747.6	754.0	758.2
42.5°	5145.2	2023.4	718.1	735.0	726.5	692.8	650.5	671.6	686.4	709.6	713.9
45°	5225.4	1949.5	690.6	675.9	675.9	614.6	597.7	602.0	635.7	661.1	656.9
47.5°	5094.4	1877.7	642.1	597.7	612.5	561.8	542.8	542.8	578.7	610.4	604.1
48°	5043.7	1848.1	644.2	580.8	591.4	553.4	534.4	530.2	570.3	599.8	599.8
50°	4792.4	1738.3	589.3	534.4	513.3	509.1	496.4	500.6	525.9	553.4	553.4
52.5°	4302.4	1501.7	498.5	458.3	420.3	445.6	452.0	443.5	456.2	481.6	479.5
55°	3590.6	1153.2	399.2	380.2	350.6	378.0	390.7	380.2	367.5	386.5	386.5
57.5°	2300.1	621.0	318.9	323.2	293.6	321.0	331.6	306.3	283.0	297.8	295.7
60°	1037.0	371.7	261.9	255.6	236.6	268.3	285.1	255.6	223.9	234.5	245.0
62.5°	388.6	264.0	198.6	194.4	190.1	219.7	228.1	204.9	173.2	179.6	181.7
65°	285.1	232.4	158.4	143.6	152.1	173.2	169.0	145.7	124.6	124.6	128.8
67.5°	242.9	202.8	128.8	111.9	111.9	114.0	105.6	92.9	86.6	90.8	95.0
70°	190.1	160.5	101.3	86.6	78.1	69.7	61.2	59.1	52.8	59.1	57.0
72.5°	122.5	107.7	78.1	65.5	59.1	48.6	40.1	38.0	31.7	29.6	29.6
75°	65.5	65.5	61.2	52.8	46.5	38.0	31.7	25.3	16.9	12.7	12.7
77.5°	46.5	50.7	54.9	50.7	42.2	31.7	25.3	16.9	8.4	4.2	4.2
80°	44.3	50.7	54.9	48.6	42.2	31.7	23.2	12.7	6.3	2.1	2.1
82.5°	40.1	46.5	50.7	44.3	38.0	27.4	21.1	12.7	6.3	2.1	2.1
85°	8.4	10.6	12.7	12.7	14.8	19.0	14.8	10.6	4.2	2.1	2.1
87.5°	6.3	6.3	6.3	6.3	6.3	6.3	4.2	4.2	2.1	2.1	2.1
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)