

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: P453754

Luminaire Tested: **GALN-SA4D-740-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4D-740-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30535 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

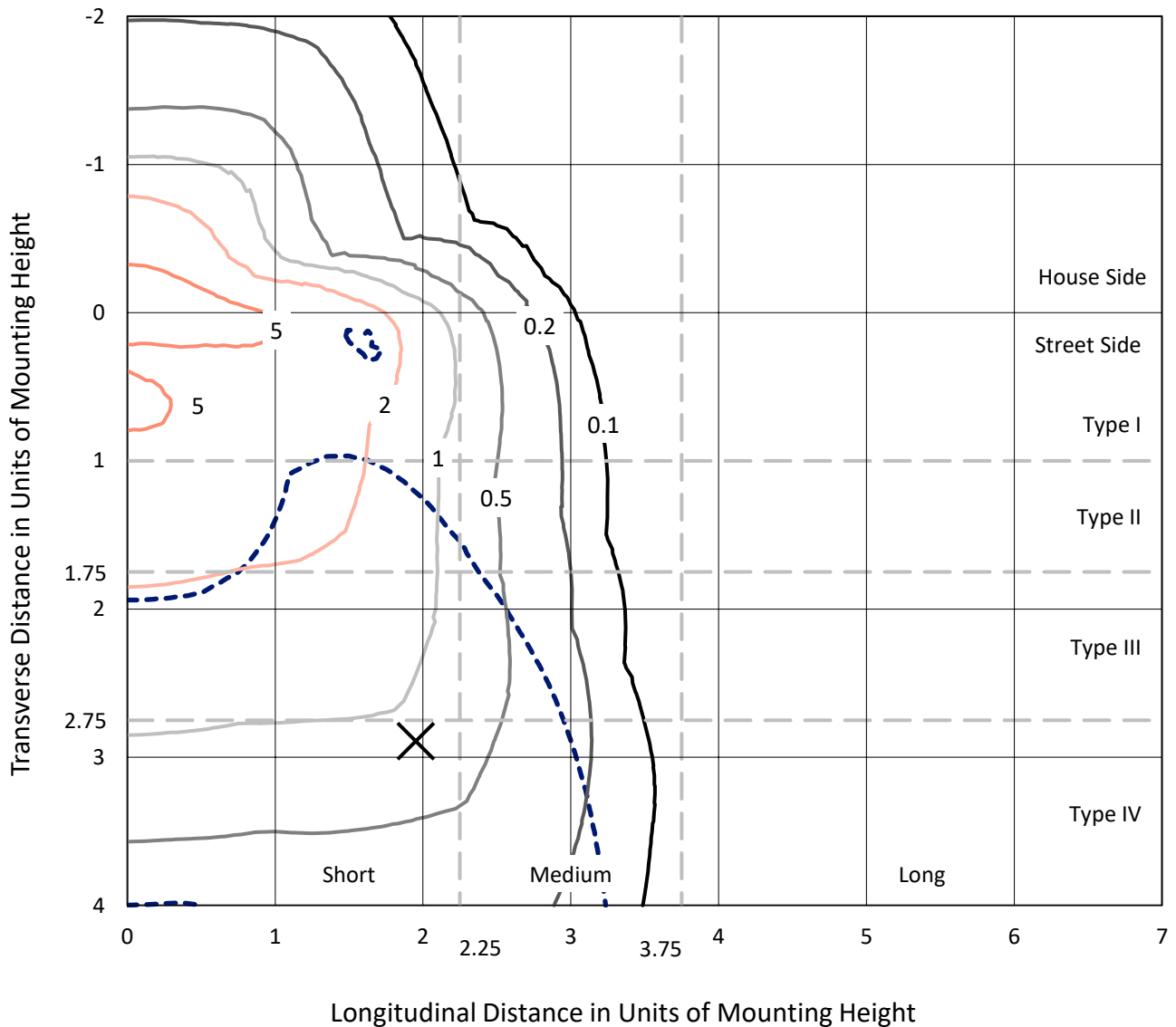
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

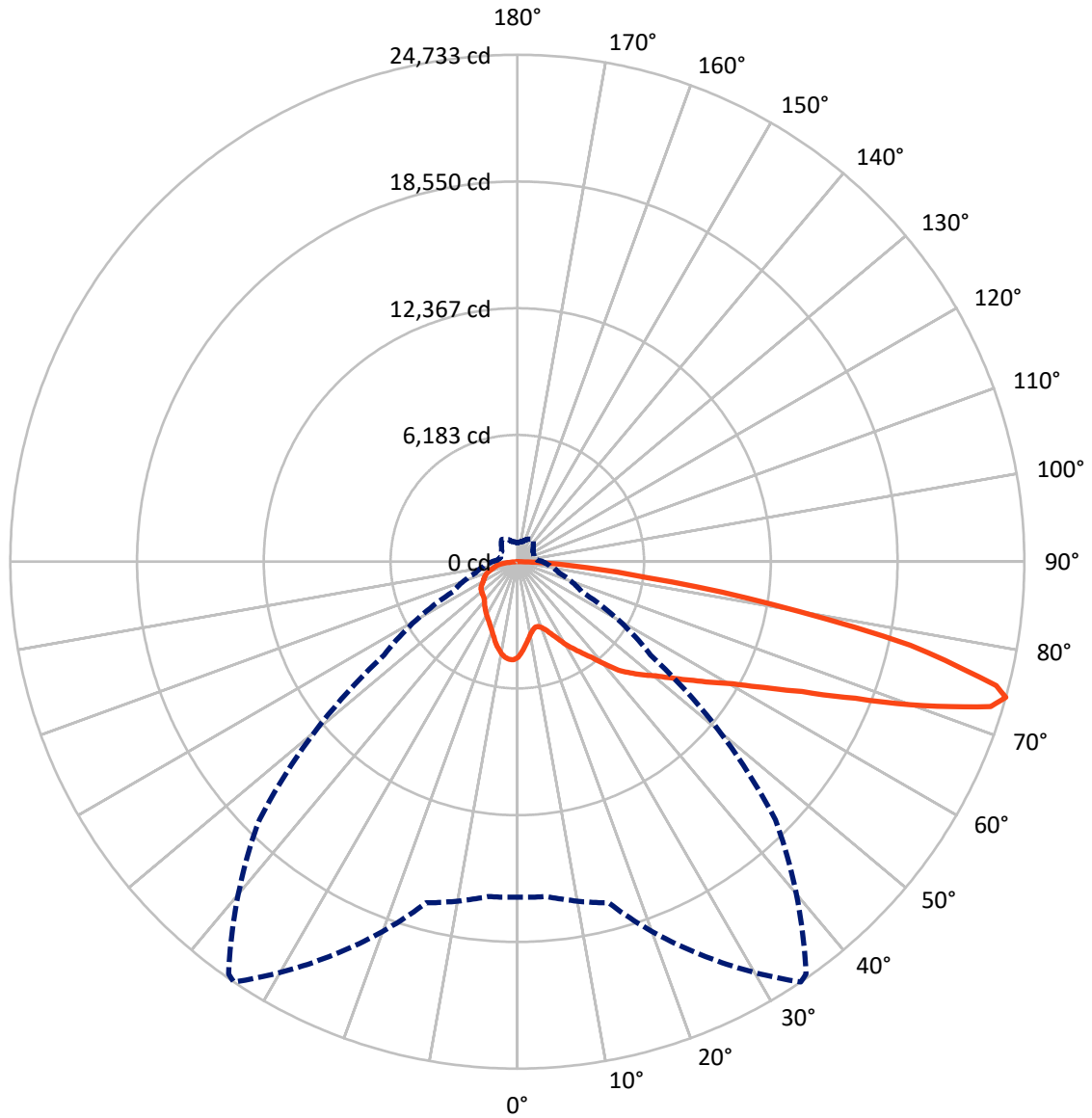
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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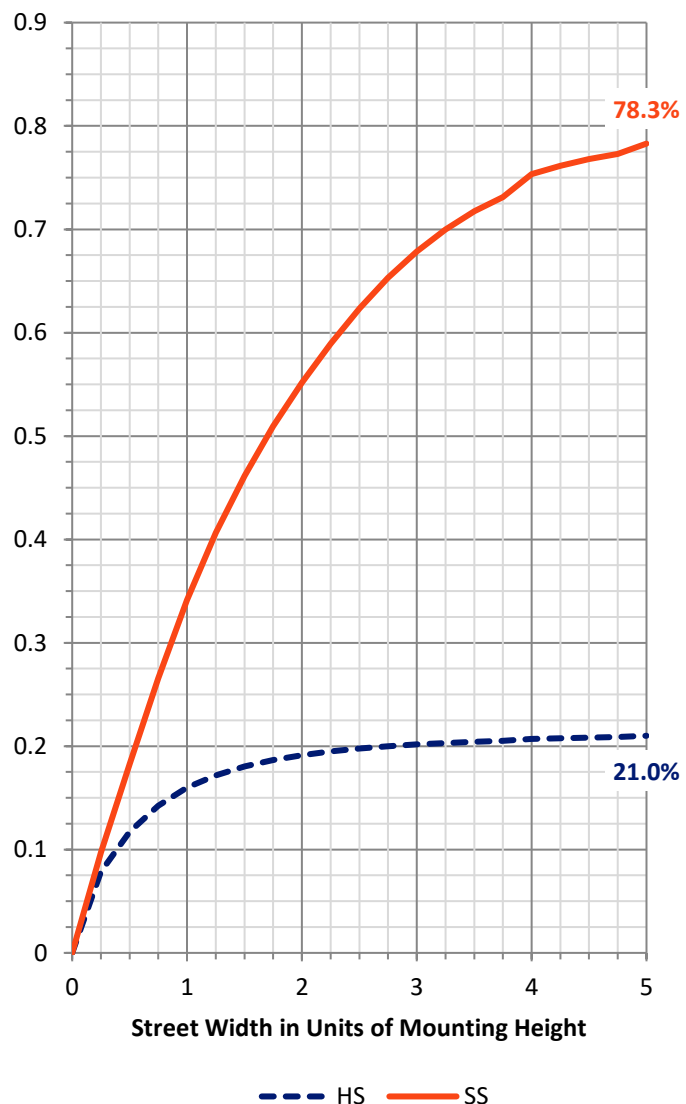
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6498.1	0.0	6498.1
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	24036.9	0.0	24036.9
	% Fixture	78.7	0.0	78.7
Total	Lumens	30535.0	0.0	30535.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.0	1.4
10°-20°	1160.7	3.8
20°-30°	1913.7	6.3
30°-40°	2866.4	9.4
40°-50°	4167.0	13.6
50°-60°	5820.3	19.1
60°-70°	7286.7	23.9
70°-80°	6025.5	19.7
80°-90°	870.6	2.9
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°	30535.0	100.0
0°-180°	30535.0	100.0

Coefficient of Utilization



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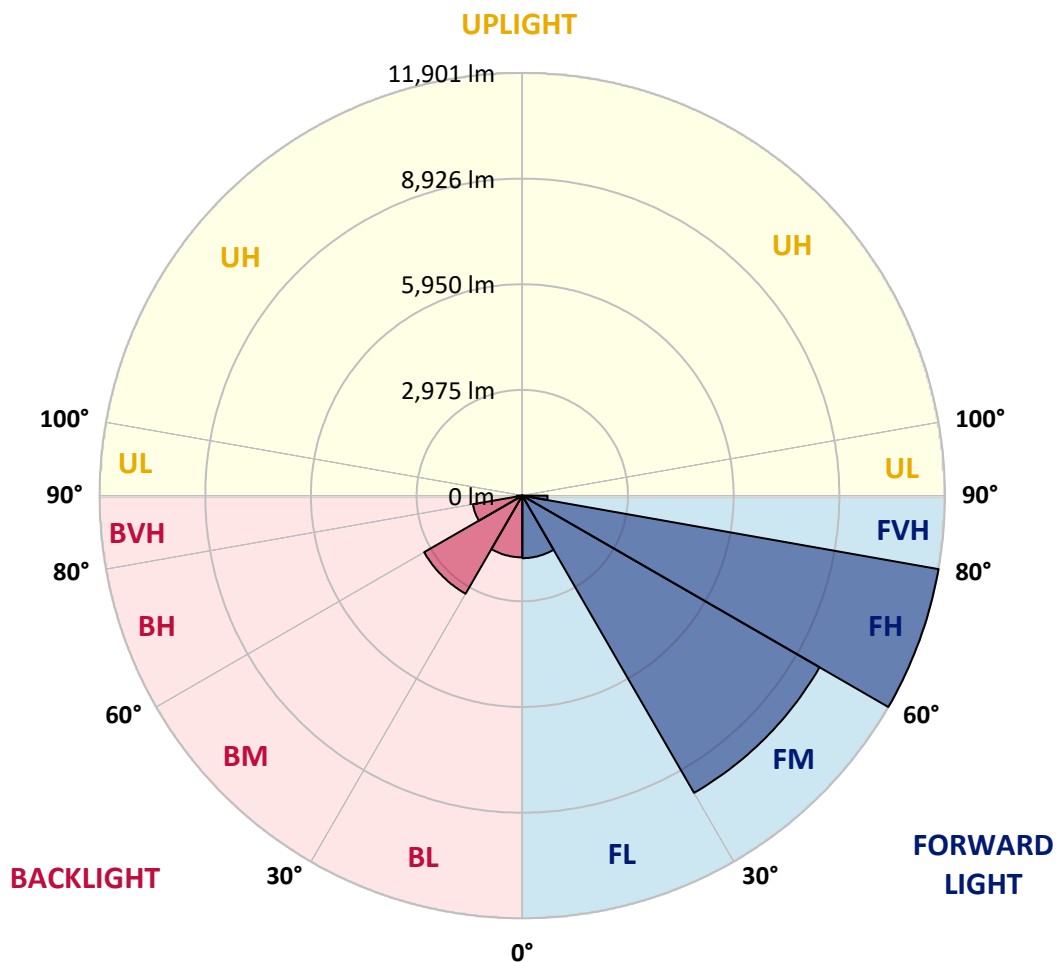
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1760.2	5.8			
FM (30°-60°)	9662.5	31.6			
FH (60°-80°)	11900.9	39.0			G4/12000
FVH (80°-90°)	713.3	2.3			G4/750
BL (0°-30°)	1738.1	5.7	B3/2500		
BM (30°-60°)	3191.2	10.5	B3/5000		
BH (60°-80°)	1411.3	4.6	B3/2500		G3/2500
BVH (80°-90°)	157.4	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1
2.5°	4308.5	4330.5	4342.4	4384.7	4394.8	4408.3	4443.9	4491.2	4552.1	4606.3	4653.6
5°	3949.9	3983.8	4004.1	4041.3	4114.0	4120.8	4215.5	4323.8	4447.3	4562.3	4657.0
7.5°	3609.9	3647.1	3664.0	3731.7	3828.1	3843.3	3982.1	4152.9	4359.3	4533.5	4679.0
10°	3354.5	3373.1	3410.3	3461.0	3576.1	3586.2	3767.2	3995.6	4262.9	4520.0	4716.2
12.5°	3215.8	3225.9	3234.4	3288.5	3401.8	3417.1	3606.5	3865.3	4186.7	4530.1	4777.1
15°	3236.1	3239.4	3202.2	3212.4	3303.7	3325.7	3513.5	3779.1	4139.4	4555.5	4868.5
17.5°	3406.9	3395.1	3303.7	3256.4	3320.6	3330.8	3494.9	3745.2	4117.4	4602.9	4963.2
20°	3675.9	3659.0	3501.6	3396.8	3434.0	3442.4	3555.8	3770.6	4139.4	4680.7	5110.4
22.5°	4010.8	4004.1	3765.5	3638.7	3637.0	3637.0	3696.2	3862.0	4205.4	4787.3	5264.3
25°	4479.4	4443.9	4132.6	3968.5	3922.9	3919.5	3912.7	4012.5	4289.9	4900.6	5447.0
27.5°	4959.8	4898.9	4621.5	4369.4	4271.3	4259.5	4215.5	4225.7	4398.2	5029.2	5655.1
30°	5391.2	5352.3	5091.8	4812.6	4695.9	4668.9	4547.1	4491.2	4579.2	5260.9	5986.6
32.5°	5721.0	5697.4	5494.4	5240.6	5068.1	5063.0	4885.4	4839.7	4861.7	5541.7	6365.5
35°	5988.3	5996.8	5893.6	5673.7	5475.8	5447.0	5328.6	5271.1	5206.8	5947.7	6842.6
37.5°	6353.7	6372.3	6365.5	6176.1	5934.2	5941.0	5913.9	5819.2	5648.3	6401.1	7372.1
40°	6756.3	6769.8	6768.2	6695.4	6568.5	6575.3	6565.2	6456.9	6201.5	6977.9	7960.7
42.5°	7312.9	7248.6	7081.1	7153.8	7228.3	7260.4	7329.8	7226.6	6876.4	7593.7	8513.9
45°	7935.4	7813.6	7434.6	7468.5	7744.2	7805.1	8187.4	8045.3	7608.9	8300.8	9165.2
47.5°	8327.8	8207.7	7888.0	7881.2	8246.6	8305.8	8982.5	8930.0	8275.4	9063.7	9960.2
50°	8678.0	8661.1	8300.8	8387.0	8744.0	8831.9	9848.6	9799.5	8940.2	9963.6	10826.3
52.5°	9197.3	9060.3	8772.7	8950.3	9422.3	9537.3	10707.9	10564.1	9550.9	10758.7	11667.1
55°	9430.8	9398.6	9381.7	9535.6	10183.5	10266.4	11543.6	11213.7	10071.9	11431.9	12306.5
57.5°	10055.0	9995.8	10163.2	10268.1	11080.1	11206.9	12416.5	11892.1	10528.6	11966.5	12617.8
60°	10863.6	10831.4	10985.3	11174.8	12081.5	12274.4	13411.1	12470.6	10895.7	12235.5	12446.9
62.5°	12071.4	12068.0	12039.2	12445.2	13500.8	13678.4	14553.0	13033.9	10953.2	12034.1	11563.9
65°	13803.6	13742.7	13492.3	13935.5	15266.8	15474.9	15742.2	13348.5	10606.4	11000.6	9736.9
67.5°	15615.3	15611.9	15408.9	15984.1	17802.6	18017.4	17229.1	13279.2	9643.9	8911.4	6915.3
70°	17117.5	17044.7	17303.5	18836.1	21042.0	21290.7	18529.9	12462.1	7681.6	5885.1	4108.9
72.5°	17477.8	17481.1	18019.1	21035.2	24152.9	24191.8	18998.5	10100.6	5140.8	3246.2	2055.3
74°	16368.1	16396.8	17230.8	21145.2	24733.1	24557.2	17800.9	7938.7	3476.3	2119.6	1481.9
75°	14940.3	14759.3	15965.5	20412.7	24130.9	23941.4	16398.5	6370.6	2652.5	1693.3	1297.5
77.5°	7987.8	8172.2	10033.0	15233.0	19604.1	19385.9	11119.0	3055.1	1432.8	1179.1	933.8
80°	2843.6	3136.3	4408.3	7970.9	12568.7	12636.4	5306.6	1400.7	1008.2	869.5	659.7
82.5°	1160.4	1192.6	1892.9	3537.2	6382.5	6443.4	2167.0	832.3	720.6	598.8	394.1
85°	453.4	466.9	837.3	1590.1	2723.5	2901.1	749.4	439.8	443.2	343.4	201.3
87.5°	152.2	172.5	343.4	529.5	925.3	906.7	218.2	130.3	159.0	148.9	62.6
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°	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1	4662.1
2.5°	4677.3	4709.5	4731.4	4755.1	4777.1	4783.9	4778.8	4794.0	4795.7	4797.4	4799.1
5°	4704.4	4748.4	4790.7	4814.3	4824.5	4816.0	4787.3	4772.0	4758.5	4748.4	4751.7
7.5°	4741.6	4804.2	4843.1	4853.2	4826.2	4787.3	4716.2	4660.4	4624.9	4601.2	4599.5
10°	4799.1	4860.0	4892.2	4863.4	4789.0	4694.2	4582.6	4477.7	4398.2	4374.5	4372.8
12.5°	4871.9	4941.2	4939.5	4854.9	4724.7	4555.5	4374.5	4252.7	4144.5	4090.3	4112.3
15°	4966.6	5019.0	4970.0	4817.7	4611.3	4379.6	4156.3	3990.5	3868.7	3811.2	3814.6
17.5°	5076.5	5122.2	4992.0	4751.7	4452.3	4154.6	3895.8	3738.5	3642.0	3599.8	3596.4
20°	5213.6	5227.1	4992.0	4636.7	4247.6	3892.4	3645.4	3535.5	3481.3	3459.4	3466.1
22.5°	5360.7	5333.7	4964.9	4474.3	3978.7	3618.4	3452.6	3403.5	3376.5	3373.1	3376.5
25°	5526.5	5450.4	4909.1	4254.4	3697.9	3381.5	3285.1	3293.6	3298.6	3298.6	3310.5
27.5°	5729.5	5577.3	4816.0	3977.0	3369.7	3161.6	3134.6	3193.8	3220.8	3225.9	3234.4
30°	5996.8	5716.0	4662.1	3630.2	3090.6	2963.7	3011.1	3090.6	3121.0	3139.6	3136.3
32.5°	6314.8	5868.2	4454.0	3283.4	2865.6	2825.0	2882.5	2963.7	2997.5	3007.7	2994.2
35°	6688.6	6040.8	4180.0	2958.6	2669.4	2693.1	2760.7	2786.1	2816.5	2816.5	2823.3
37.5°	7091.2	6179.5	3845.0	2660.9	2517.1	2603.4	2652.5	2628.8	2615.2	2598.3	2606.8
40°	7500.6	6282.7	3410.3	2366.6	2364.9	2510.4	2523.9	2456.2	2402.1	2385.2	2376.7
42.5°	7857.6	6346.9	3017.8	2138.2	2221.1	2419.0	2429.2	2320.9	2234.6	2183.9	2167.0
45°	8278.8	6421.4	2633.8	1948.7	2087.5	2346.3	2371.6	2226.2	2099.3	1992.7	1965.7
47.5°	8855.6	6590.5	2331.0	1801.6	1991.0	2300.6	2336.1	2148.4	1980.9	1842.2	1820.2
50°	9506.9	6822.3	2095.9	1701.8	1916.6	2260.0	2304.0	2068.8	1870.9	1717.0	1700.1
52.5°	10104.0	6947.5	1892.9	1612.1	1843.9	2185.6	2261.7	2011.3	1762.7	1591.8	1576.6
55°	10430.5	6744.5	1693.3	1524.1	1744.1	2089.1	2202.5	1931.8	1657.8	1525.8	1503.8
57.5°	10474.5	6324.9	1512.3	1429.4	1639.2	1970.7	2092.5	1835.4	1590.1	1480.2	1461.6
60°	10134.5	5699.1	1371.9	1351.6	1532.6	1837.1	1969.0	1750.8	1520.8	1429.4	1410.8
62.5°	9288.7	5019.0	1273.8	1280.6	1424.3	1696.7	1877.7	1669.6	1454.8	1373.6	1356.7
65°	7833.9	4142.8	1179.1	1207.8	1327.9	1586.7	1794.8	1602.0	1388.8	1331.3	1316.1
67.5°	5441.9	2990.8	1101.2	1131.7	1236.6	1475.1	1698.4	1529.2	1314.4	1283.9	1260.3
70°	3012.8	1840.5	1009.9	1045.4	1141.8	1349.9	1590.1	1419.3	1206.1	1192.6	1158.8
72.5°	1583.4	1172.3	906.7	945.6	1013.3	1189.2	1424.3	1299.2	1099.5	1042.0	998.1
74°	1236.6	960.8	837.3	877.9	923.6	1094.5	1326.2	1212.9	1023.4	955.8	921.9
75°	1077.6	856.0	778.1	830.6	871.2	1030.2	1250.1	1152.0	981.1	916.9	886.4
77.5°	761.2	641.1	636.0	698.6	720.6	903.3	1126.6	1048.8	874.6	806.9	778.1
80°	534.6	480.4	504.1	543.0	573.5	798.4	1045.4	906.7	717.2	637.7	627.6
82.5°	348.5	314.6	360.3	395.8	406.0	588.7	844.1	688.5	522.7	424.6	394.1
85°	160.7	157.3	206.4	201.3	199.6	287.6	500.7	402.6	301.1	225.0	211.5
87.5°	40.6	38.9	50.7	42.3	50.7	44.0	45.7	11.8	1.7	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)