

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: P453986

Luminaire Tested: **GALN-SA5A-740-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453986
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-SA5A-740-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 615mA 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: 22851 lumens
Efficiency: N/A
Efficacy: 148.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

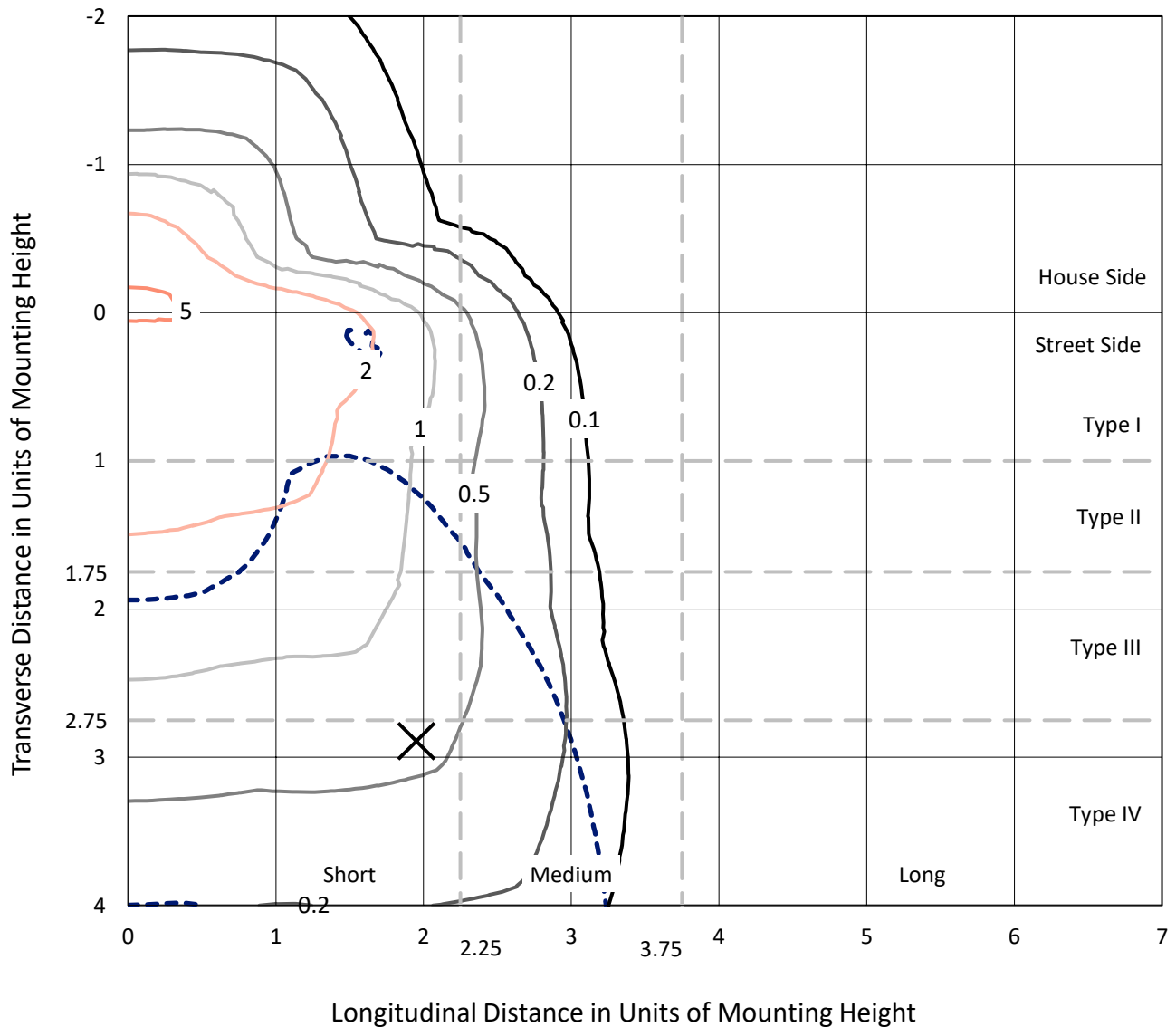
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

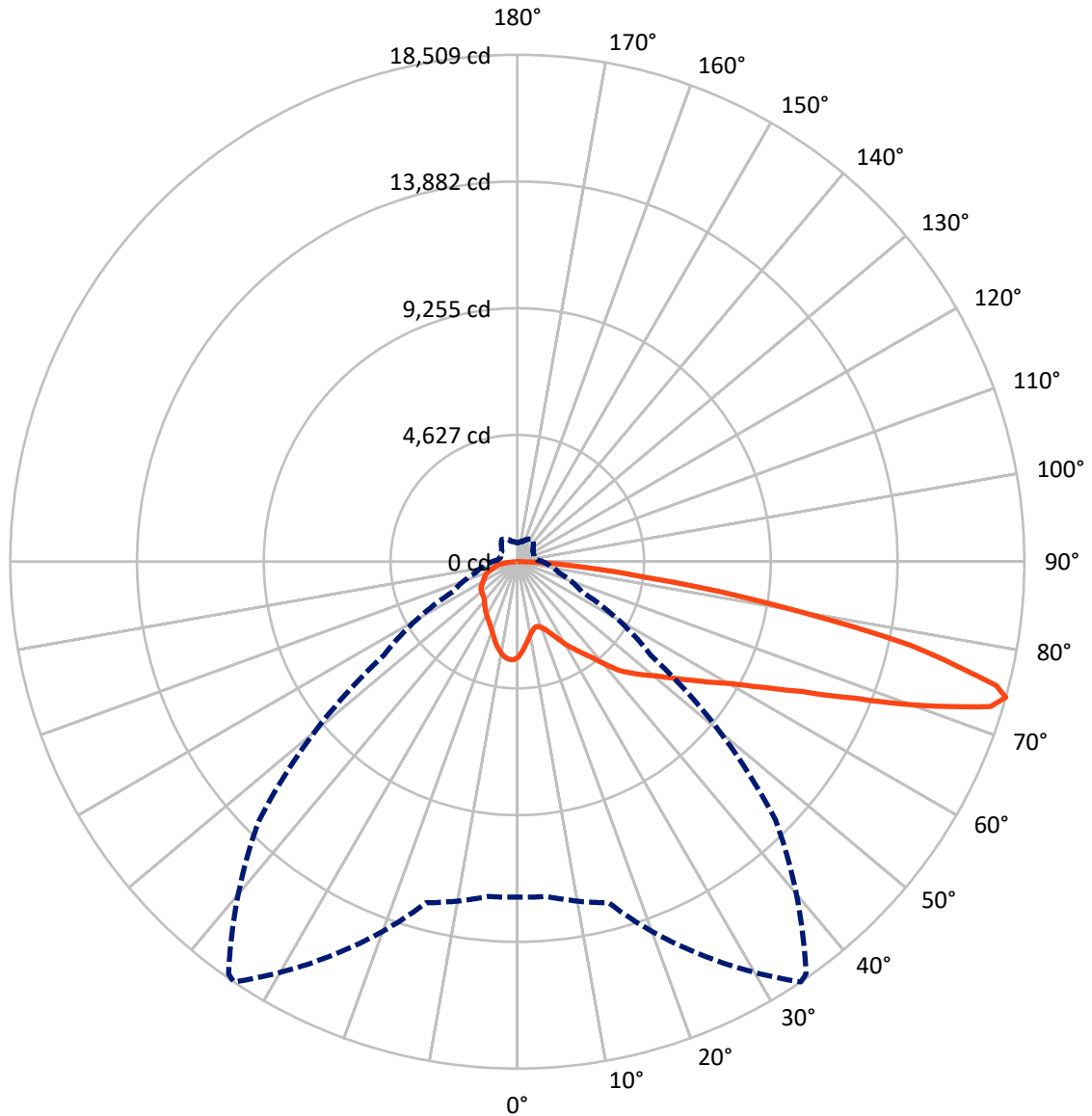
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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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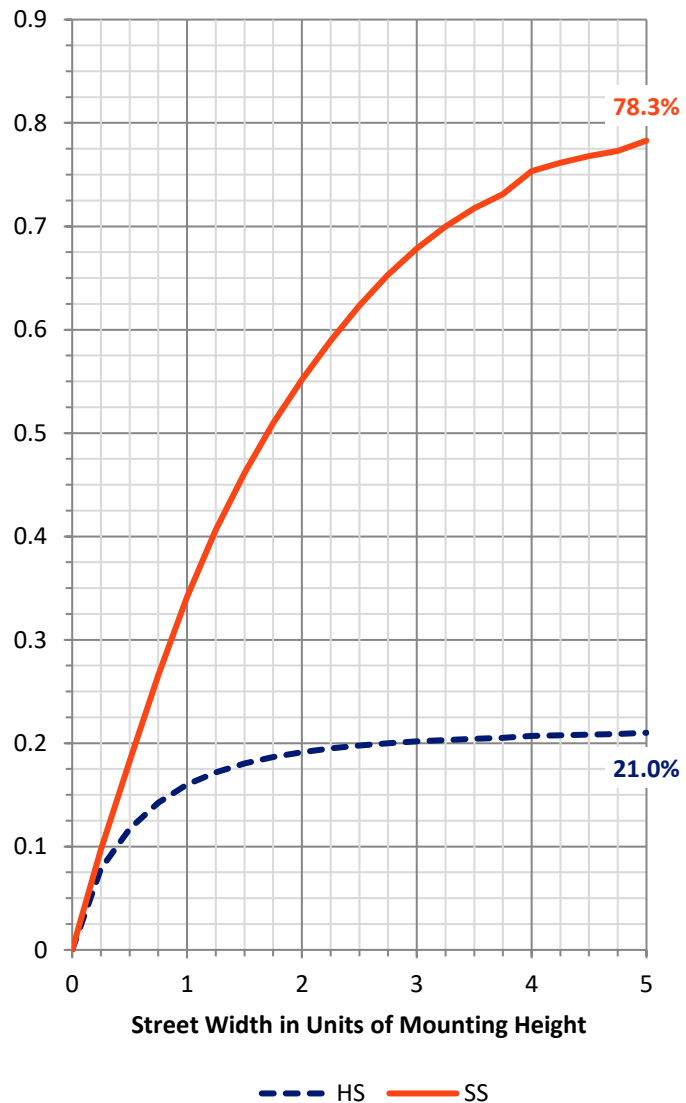
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4862.9	0.0	4862.9
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	17988.1	0.0	17988.1
	% Fixture	78.7	0.0	78.7
Total	Lumens	22851.0	0.0	22851.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.3	1.4
10°-20°	868.6	3.8
20°-30°	1432.1	6.3
30°-40°	2145.1	9.4
40°-50°	3118.4	13.6
50°-60°	4355.7	19.1
60°-70°	5453.1	23.9
70°-80°	4509.2	19.7
80°-90°	651.5	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°	22851.0	100.0
0°-180°	22851.0	100.0



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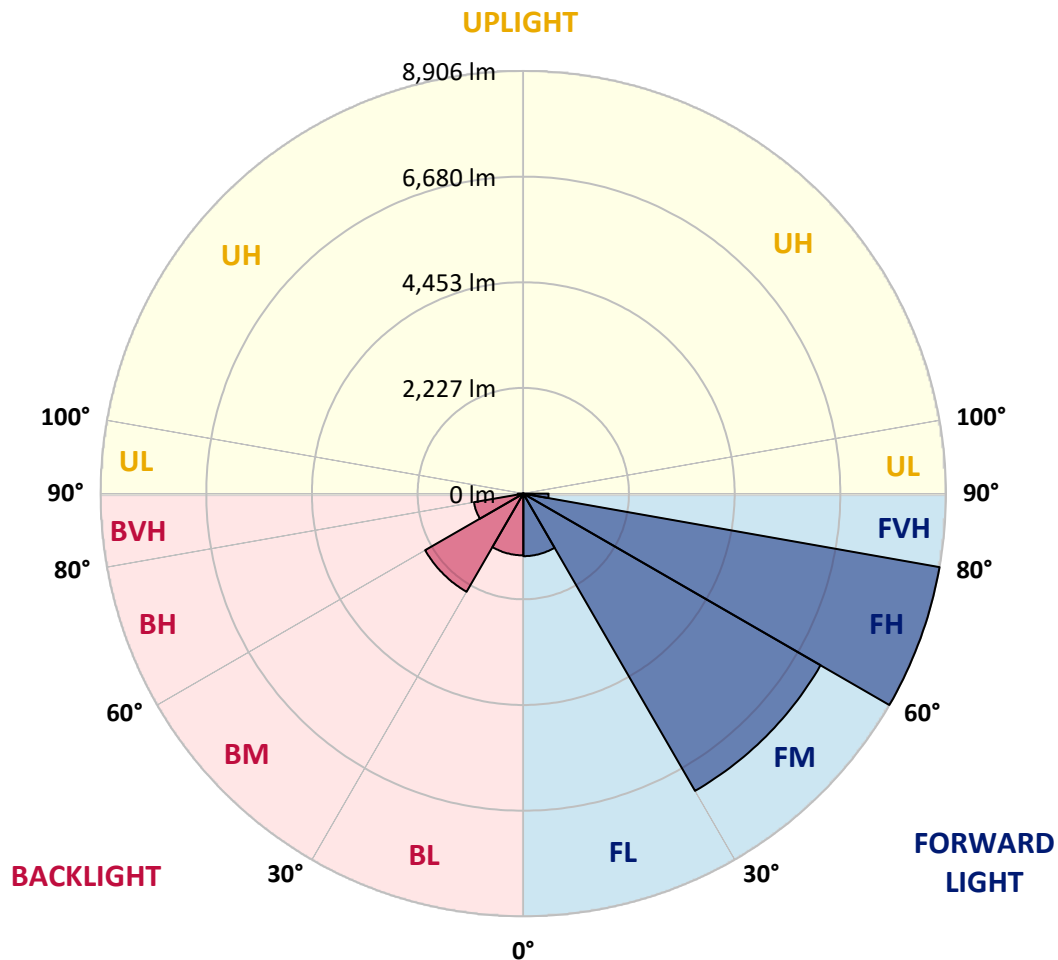
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1317.3	5.8			
FM (30°-60°)	7231.0	31.6			
FH (60°-80°)	8906.1	39.0			G4/12000
FVH (80°-90°)	533.8	2.3			G4/750
BL (0°-30°)	1300.7	5.7	B3/2500		
BM (30°-60°)	2388.2	10.5	B2/2500		
BH (60°-80°)	1056.2	4.6	B3/2500		G3/2500
BVH (80°-90°)	117.8	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°	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9
2.5°	3224.3	3240.8	3249.6	3281.3	3288.9	3299.0	3325.6	3361.0	3406.6	3447.1	3482.6
5°	2955.9	2981.3	2996.5	3024.3	3078.7	3083.8	3154.7	3235.7	3328.1	3414.2	3485.1
7.5°	2701.5	2729.3	2742.0	2792.6	2864.8	2876.2	2980.0	3107.9	3262.3	3392.7	3501.6
10°	2510.3	2524.3	2552.1	2590.1	2676.2	2683.8	2819.2	2990.1	3190.1	3382.6	3529.4
12.5°	2406.5	2414.1	2420.5	2461.0	2545.8	2557.2	2699.0	2892.6	3133.2	3390.2	3575.0
15°	2421.7	2424.3	2396.4	2404.0	2472.4	2488.8	2629.3	2828.1	3097.7	3409.1	3643.3
17.5°	2549.6	2540.7	2472.4	2436.9	2485.0	2492.6	2615.4	2802.8	3081.3	3444.6	3714.2
20°	2750.9	2738.2	2620.5	2542.0	2569.8	2576.2	2661.0	2821.8	3097.7	3502.8	3824.4
22.5°	3001.5	2996.5	2818.0	2723.0	2721.7	2721.7	2766.1	2890.1	3147.1	3582.6	3939.6
25°	3352.2	3325.6	3092.7	2969.9	2935.7	2933.2	2928.1	3002.8	3210.4	3667.4	4076.3
27.5°	3711.7	3666.1	3458.5	3269.9	3196.5	3187.6	3154.7	3162.3	3291.4	3763.6	4232.0
30°	4034.5	4005.4	3810.4	3601.6	3514.2	3494.0	3402.8	3361.0	3426.9	3937.0	4480.1
32.5°	4281.4	4263.6	4111.7	3921.8	3792.7	3788.9	3656.0	3621.8	3638.3	4147.2	4763.7
35°	4481.4	4487.7	4410.5	4245.9	4097.8	4076.3	3987.7	3944.6	3896.5	4451.0	5120.7
37.5°	4754.8	4768.7	4763.7	4621.9	4440.9	4445.9	4425.7	4354.8	4226.9	4790.3	5516.9
40°	5056.1	5066.2	5065.0	5010.5	4915.6	4920.7	4913.1	4832.0	4640.9	5222.0	5957.5
42.5°	5472.6	5424.5	5299.2	5353.6	5409.3	5433.4	5485.3	5408.0	5146.0	5682.7	6371.4
45°	5938.5	5847.3	5563.8	5589.1	5795.4	5841.0	6127.1	6020.8	5694.1	6211.9	6858.8
47.5°	6232.2	6142.3	5903.0	5898.0	6171.4	6215.7	6722.1	6682.8	6192.9	6782.8	7453.8
50°	6494.2	6481.5	6211.9	6276.5	6543.6	6609.4	7370.2	7333.5	6690.4	7456.3	8101.9
52.5°	6882.8	6780.3	6565.1	6698.0	7051.2	7137.3	8013.3	7905.7	7147.4	8051.3	8731.1
55°	7057.5	7033.5	7020.8	7136.0	7620.9	7682.9	8638.7	8391.8	7537.3	8555.1	9209.6
57.5°	7524.7	7480.4	7605.7	7684.2	8291.8	8386.8	9291.9	8899.5	7879.1	8955.2	9442.6
60°	8129.8	8105.7	8220.9	8362.7	9041.3	9185.6	10036.3	9332.4	8153.8	9156.5	9314.7
62.5°	9033.7	9031.1	9009.6	9313.4	10103.4	10236.3	10890.8	9754.0	8196.9	9005.8	8653.9
65°	10330.0	10284.4	10097.0	10428.7	11425.0	11580.7	11780.7	9989.4	7937.4	8232.3	7286.7
67.5°	11685.8	11683.2	11531.3	11961.7	13322.6	13483.4	12893.5	9937.5	7217.1	6668.9	5175.1
70°	12809.9	12755.5	12949.2	14096.1	15746.9	15933.0	13867.0	9326.1	5748.6	4404.2	3074.9
72.5°	13079.6	13082.1	13484.7	15741.8	18074.9	18104.0	14217.6	7558.9	3847.2	2429.3	1538.1
74°	12249.1	12270.6	12894.7	15824.1	18509.1	18377.5	13321.4	5941.0	2601.5	1586.2	1109.0
75°	11180.7	11045.2	11947.8	15275.9	18058.5	17916.7	12271.9	4767.5	1985.0	1267.2	971.0
77.5°	5977.7	6115.7	7508.2	11399.7	14670.8	14507.5	8320.9	2286.3	1072.2	882.4	698.8
80°	2128.0	2347.0	3299.0	5965.0	9405.8	9456.5	3971.2	1048.2	754.5	650.7	493.7
82.5°	868.4	892.5	1416.6	2647.1	4776.3	4821.9	1621.7	622.8	539.3	448.1	295.0
85°	339.3	349.4	626.6	1190.0	2038.1	2171.1	560.8	329.1	331.7	257.0	150.6
87.5°	113.9	129.1	257.0	396.2	692.5	678.5	163.3	97.5	119.0	111.4	46.8
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°	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9	3488.9
2.5°	3500.3	3524.3	3540.8	3558.5	3575.0	3580.0	3576.2	3587.6	3588.9	3590.2	3591.4
5°	3520.5	3553.5	3585.1	3602.8	3610.4	3604.1	3582.6	3571.2	3561.1	3553.5	3556.0
7.5°	3548.4	3595.2	3624.3	3631.9	3611.7	3582.6	3529.4	3487.6	3461.0	3443.3	3442.1
10°	3591.4	3637.0	3661.1	3639.5	3583.8	3512.9	3429.4	3350.9	3291.4	3273.7	3272.4
12.5°	3645.9	3697.8	3696.5	3633.2	3535.7	3409.1	3273.7	3182.5	3101.5	3061.0	3077.5
15°	3716.8	3756.0	3719.3	3605.4	3450.9	3277.5	3110.4	2986.3	2895.2	2852.1	2854.7
17.5°	3799.0	3833.2	3735.8	3556.0	3331.9	3109.1	2915.4	2797.7	2725.5	2693.9	2691.4
20°	3901.6	3911.7	3735.8	3469.9	3178.7	2912.9	2728.1	2645.8	2605.3	2588.8	2593.9
22.5°	4011.7	3991.5	3715.5	3348.4	2977.5	2707.8	2583.8	2547.0	2526.8	2524.3	2526.8
25°	4135.8	4078.8	3673.7	3183.8	2767.3	2530.6	2458.4	2464.8	2468.6	2468.6	2477.4
27.5°	4287.7	4173.8	3604.1	2976.2	2521.7	2366.0	2345.8	2390.1	2410.3	2414.1	2420.5
30°	4487.7	4277.6	3488.9	2716.7	2312.8	2217.9	2253.4	2312.8	2335.6	2349.6	2347.0
32.5°	4725.7	4391.5	3333.2	2457.2	2144.5	2114.1	2157.1	2217.9	2243.2	2250.8	2240.7
35°	5005.5	4520.6	3128.1	2214.1	1997.6	2015.4	2066.0	2085.0	2107.8	2107.8	2112.8
37.5°	5306.8	4624.4	2877.5	1991.3	1883.7	1948.3	1985.0	1967.3	1957.1	1944.5	1950.8
40°	5613.1	4701.7	2552.1	1771.0	1769.8	1878.6	1888.8	1838.1	1797.6	1785.0	1778.6
42.5°	5880.2	4749.8	2258.4	1600.1	1662.2	1810.3	1817.9	1736.9	1672.3	1634.3	1621.7
45°	6195.4	4805.5	1971.0	1458.3	1562.2	1755.8	1774.8	1666.0	1571.0	1491.3	1471.0
47.5°	6627.1	4932.1	1744.4	1348.2	1490.0	1721.7	1748.2	1607.7	1482.4	1378.6	1362.1
50°	7114.5	5105.5	1568.5	1273.5	1434.3	1691.3	1724.2	1548.2	1400.1	1284.9	1272.3
52.5°	7561.4	5199.2	1416.6	1206.4	1379.9	1635.6	1692.5	1505.2	1319.1	1191.2	1179.8
55°	7805.7	5047.3	1267.2	1140.6	1305.2	1563.4	1648.2	1445.7	1240.6	1141.9	1125.4
57.5°	7838.6	4733.3	1131.7	1069.7	1226.7	1474.8	1566.0	1373.5	1190.0	1107.7	1093.8
60°	7584.2	4264.9	1026.7	1011.5	1146.9	1374.8	1473.5	1310.2	1138.1	1069.7	1055.8
62.5°	6951.2	3756.0	953.2	958.3	1065.9	1269.7	1405.2	1249.5	1088.7	1027.9	1015.3
65°	5862.5	3100.3	882.4	903.9	993.8	1187.4	1343.1	1198.8	1039.3	996.3	984.9
67.5°	4072.5	2238.2	824.1	846.9	925.4	1103.9	1271.0	1144.4	983.6	960.8	943.1
70°	2254.6	1377.3	755.8	782.3	854.5	1010.2	1190.0	1062.1	902.6	892.5	867.2
72.5°	1184.9	877.3	678.5	707.7	758.3	889.9	1065.9	972.2	822.9	779.8	746.9
74°	925.4	719.0	626.6	657.0	691.2	819.1	992.5	907.7	765.9	715.2	689.9
75°	806.4	640.6	582.3	621.6	652.0	770.9	935.5	862.1	734.2	686.1	663.3
77.5°	569.7	479.8	476.0	522.8	539.3	676.0	843.1	784.9	654.5	603.8	582.3
80°	400.0	359.5	377.2	406.4	429.1	597.5	782.3	678.5	536.8	477.3	469.7
82.5°	260.8	235.5	269.6	296.2	303.8	440.5	631.7	515.2	391.2	317.7	295.0
85°	120.3	117.7	154.4	150.6	149.4	215.2	374.7	301.3	225.3	168.4	158.2
87.5°	30.4	29.1	38.0	31.6	38.0	32.9	34.2	8.9	1.3	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)