

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: P456646

Luminaire Tested: **GALN-SA7D-830-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7D-830-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43061 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G5

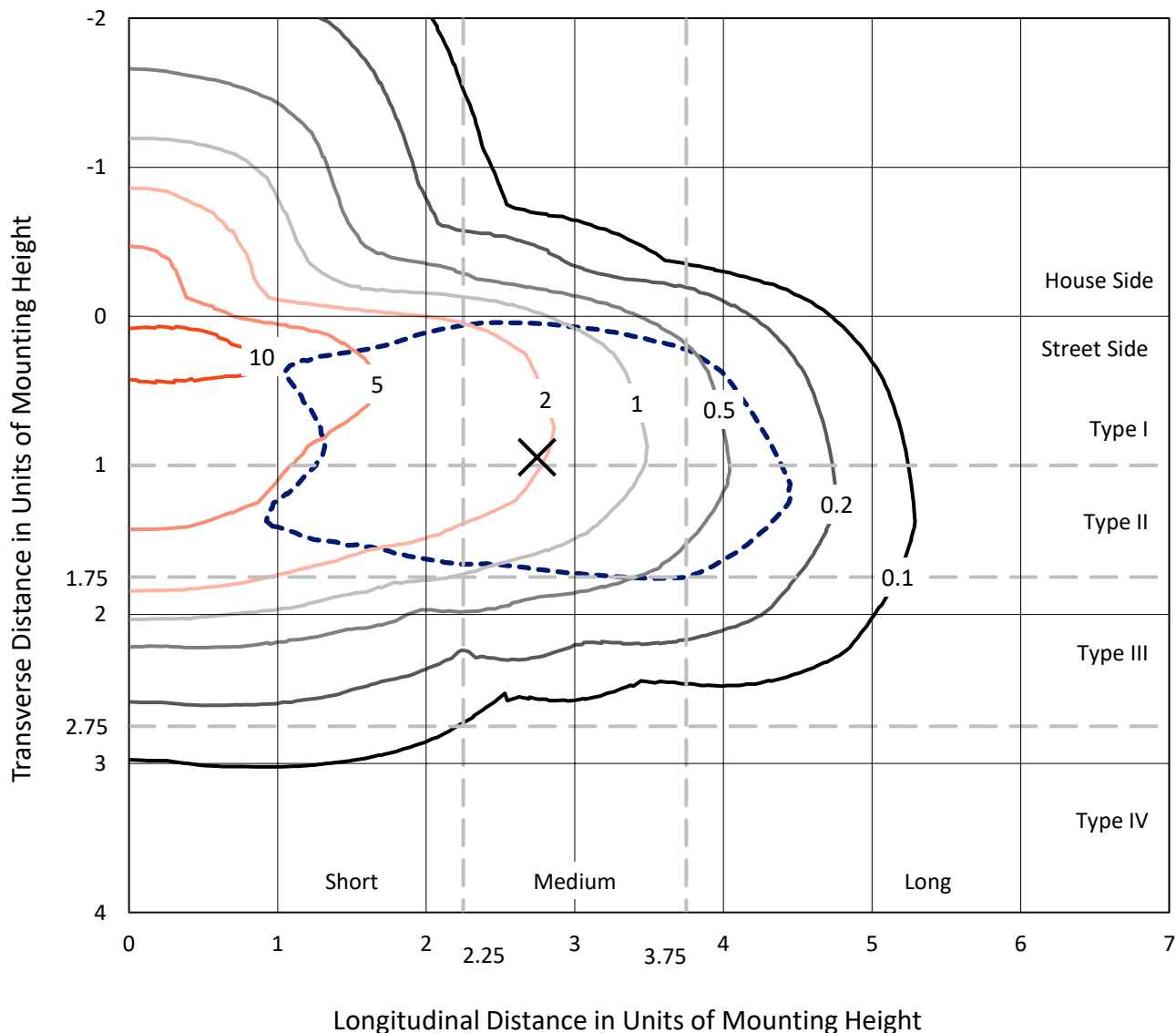
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

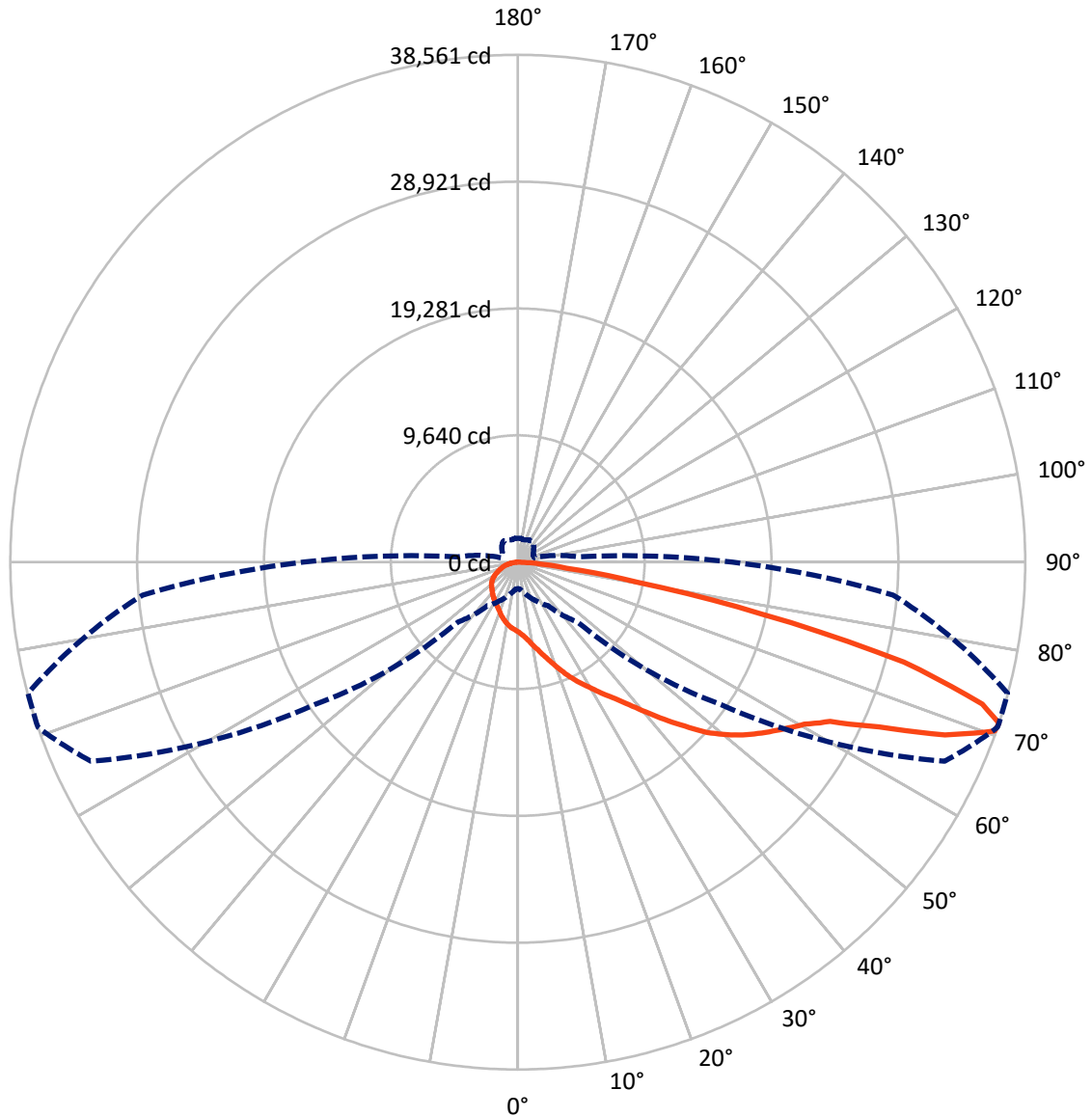
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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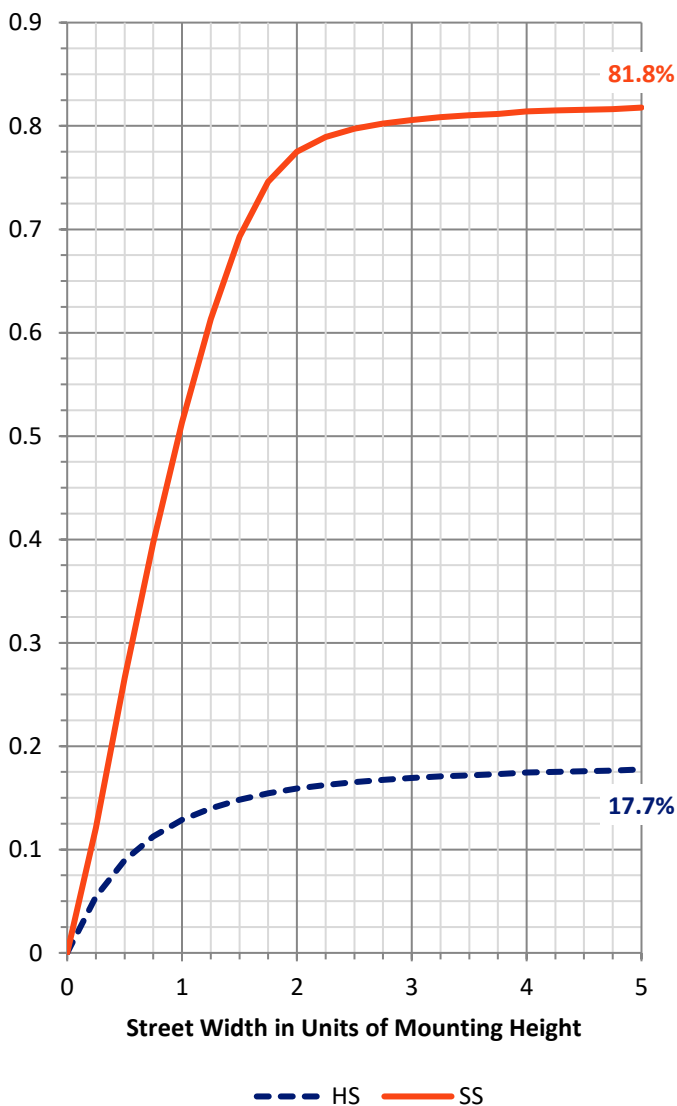
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7744.4	0.0	7744.4
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	35316.6	0.0	35316.6
	% Fixture	82.0	0.0	82.0
Total	Lumens	43061.0	0.0	43061.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.6	1.2
10°-20°	1724.0	4.0
20°-30°	3012.8	7.0
30°-40°	4481.2	10.4
40°-50°	6602.5	15.3
50°-60°	9243.6	21.5
60°-70°	10338.6	24.0
70°-80°	6315.2	14.7
80°-90°	812.4	1.9
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°	43061.0	100.0
0°-180°	43061.0	100.0



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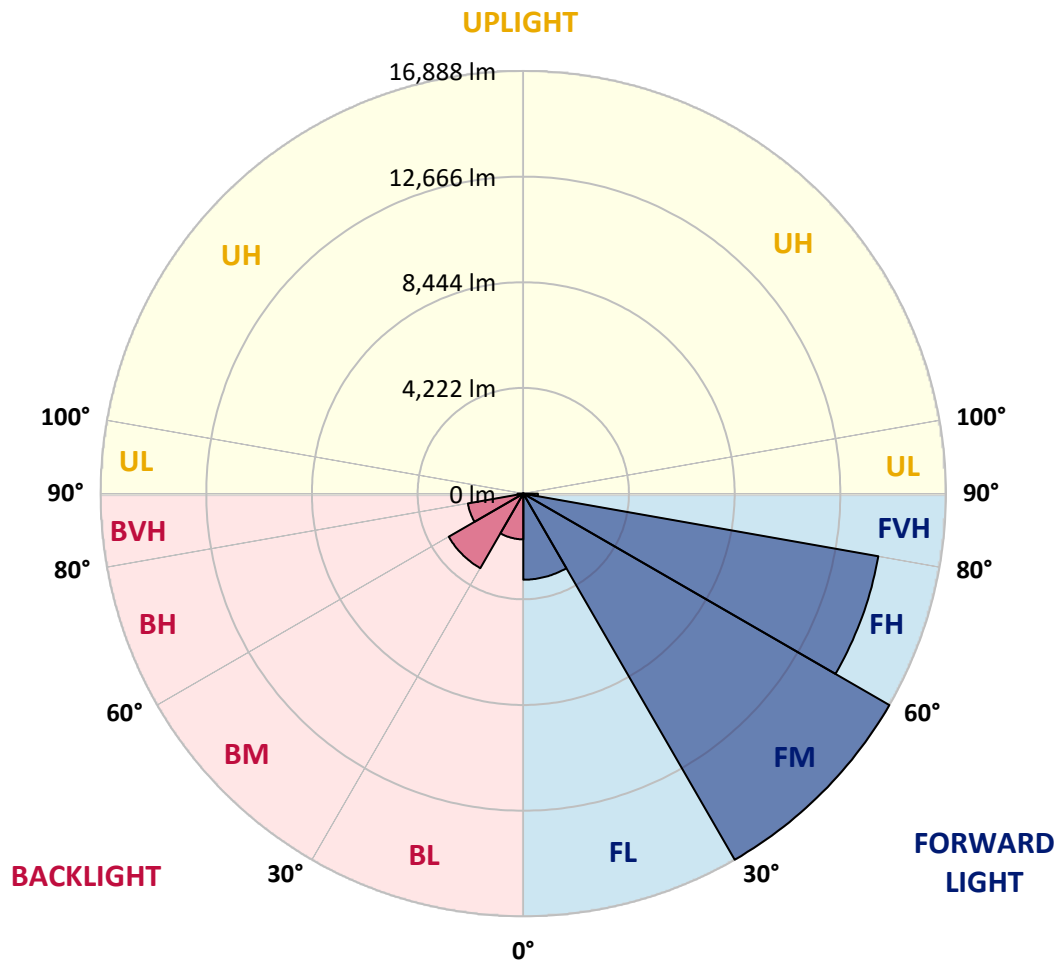
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3440.6	8.0			
FM (30°-60°)	16887.7	39.2			
FH (60°-80°)	14403.8	33.4			G5
FVH (80°-90°)	584.5	1.4			G4/750
BL (0°-30°)	1826.9	4.2	B3/2500		
BM (30°-60°)	3439.6	8.0	B3/5000		
BH (60°-80°)	2250.1	5.2	B3/2500		G3/2500
BVH (80°-90°)	227.8	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9
2.5°	5867.1	5838.7	5841.1	5800.8	5748.8	5692.0	5611.5	5540.5	5483.7	5450.6	5353.5
5°	6501.4	6473.0	6437.5	6349.9	6312.0	6172.4	5994.9	5834.0	5710.9	5642.3	5448.2
7.5°	7015.0	7007.9	6998.4	6948.7	6851.7	6657.6	6506.1	6226.8	6044.6	5914.4	5583.1
10°	7332.1	7343.9	7351.0	7360.5	7320.3	7218.5	7010.2	6657.6	6425.6	6260.0	5758.2
12.5°	7493.0	7504.9	7545.1	7632.7	7687.1	7675.3	7504.9	7159.3	6839.8	6622.1	5945.2
15°	7592.4	7611.4	7682.4	7798.3	7980.6	8096.6	8013.7	7694.2	7343.9	7086.0	6167.7
17.5°	7701.3	7722.6	7800.7	7966.4	8205.4	8456.3	8546.2	8271.7	7890.6	7583.0	6416.2
20°	7762.8	7791.2	7902.5	8120.2	8399.5	8764.0	9062.2	8917.8	8501.3	8160.5	6702.6
22.5°	7862.2	7885.9	7980.6	8212.5	8546.2	9003.0	9578.1	9547.4	9180.5	8740.3	7017.3
25°	8132.1	8169.9	8217.3	8356.9	8678.8	9246.8	10006.5	10219.5	9838.5	9346.2	7306.1
27.5°	8640.9	8671.7	8669.3	8688.2	8870.5	9457.4	10378.1	10884.6	10491.7	9959.2	7585.3
30°	9220.7	9232.6	9242.0	9199.4	9239.7	9672.8	10718.9	11542.5	11149.6	10588.7	7829.1
32.5°	9926.0	9949.7	9869.2	9760.4	9727.2	9992.3	11000.5	12200.4	11928.3	11227.7	8070.5
35°	10759.1	10820.6	10657.3	10465.6	10330.7	10451.4	11379.2	12872.6	12725.9	12044.2	8390.0
37.5°	11710.5	11786.3	11634.8	11258.5	11066.8	11099.9	11873.8	13703.3	13734.1	12974.4	8865.7
40°	12489.2	12588.6	12593.3	12060.8	11769.7	11807.6	12501.0	14597.9	14950.6	14124.6	9426.7
42.5°	13002.8	13099.8	13201.6	12889.2	12583.9	12799.2	13232.3	15568.3	16318.5	15521.0	10210.0
45°	13566.0	13653.6	13710.4	13568.4	13398.0	13956.6	14115.1	16600.2	17776.4	17080.6	11066.8
47.5°	14219.3	14316.3	14370.7	14235.8	14171.9	14971.9	15066.5	17563.4	19333.7	18595.3	12013.5
50°	15090.2	15163.6	15135.2	15050.0	15035.8	15750.5	15980.1	18465.2	20618.9	20226.0	12995.7
52.5°	16174.2	16261.7	16292.5	16171.8	16117.4	16306.7	16716.2	19286.4	21788.0	21627.1	14044.1
55°	16829.8	16969.4	17438.0	17627.3	17757.5	17026.2	17509.0	20192.9	22836.5	23103.9	15170.7
57.5°	15989.6	16169.4	17217.9	18164.6	19388.2	18824.9	18633.2	21139.6	23885.0	24535.8	16519.7
60°	13940.0	13980.2	15331.6	17075.9	19537.3	21137.2	20978.6	22644.8	25021.0	25979.5	18297.1
62.5°	9670.4	9755.6	11353.2	14136.4	17696.0	21970.3	24968.9	25243.4	26649.3	28140.3	20902.9
65°	4986.7	4875.4	6331.0	8884.7	13341.2	19991.7	28201.8	30021.9	30180.4	31520.0	24571.3
67.5°	3069.6	3119.3	3801.0	5187.9	7888.3	14529.3	27863.4	35860.6	35025.1	35668.9	27977.0
70°	2305.2	2366.7	2835.3	3550.1	4809.2	8307.2	22408.1	37275.9	38442.7	38277.0	29013.6
71°	2004.6	2068.5	2556.1	3230.6	4040.0	6411.4	18879.3	35794.3	38561.0	38532.6	28623.1
72.5°	1708.8	1749.0	2130.0	2735.9	3405.7	4494.4	14183.8	32102.2	36916.1	37860.4	27229.1
75°	1341.9	1372.7	1543.1	2087.4	2681.5	2759.6	7611.4	24067.2	30320.1	32118.8	22668.5
77.5°	1093.4	1114.7	1202.3	1550.2	2068.5	1954.9	3992.7	15665.3	18995.3	20805.8	13353.0
80°	868.6	892.3	944.3	1050.8	1550.2	1394.0	1905.2	7938.0	9175.8	9156.8	5329.9
82.5°	674.5	681.6	743.2	771.6	1060.3	989.3	1031.9	3360.7	3722.9	3845.9	1924.1
85°	426.0	447.3	657.9	591.7	634.3	579.8	508.8	1334.8	1644.9	1621.2	769.2
87.5°	130.2	137.3	222.5	250.9	281.6	253.2	187.0	392.9	480.4	520.7	191.7
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°	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9
2.5°	5315.7	5289.6	5197.3	5121.6	5050.6	4972.5	4906.2	4887.3	4870.7	4863.6	4861.2
5°	5365.4	5287.3	5105.0	4955.9	4837.6	4728.7	4660.1	4629.3	4598.5	4598.5	4608.0
7.5°	5436.4	5294.4	5012.7	4790.2	4641.1	4539.4	4489.7	4484.9	4492.0	4499.1	4501.5
10°	5514.5	5289.6	4877.8	4600.9	4468.4	4421.0	4423.4	4463.6	4501.5	4529.9	4534.6
12.5°	5590.2	5261.2	4719.2	4423.4	4338.2	4347.7	4413.9	4503.9	4577.2	4617.5	4619.8
15°	5675.4	5216.3	4527.5	4255.4	4227.0	4300.3	4423.4	4560.7	4671.9	4738.2	4745.3
17.5°	5746.4	5140.5	4326.4	4092.1	4127.6	4262.5	4432.9	4610.4	4745.3	4828.1	4842.3
20°	5826.9	5043.5	4118.1	3935.9	4037.6	4219.9	4413.9	4605.6	4745.3	4825.7	4844.7
22.5°	5890.8	4906.2	3919.3	3808.1	3957.2	4167.8	4350.0	4503.9	4617.5	4660.1	4688.5
25°	5916.8	4733.4	3732.3	3703.9	3893.3	4082.6	4205.7	4293.2	4328.7	4324.0	4335.8
27.5°	5902.6	4534.6	3571.4	3621.1	3812.8	3950.1	4011.6	4004.5	3940.6	3881.4	3909.8
30°	5843.4	4298.0	3436.5	3535.9	3708.7	3784.4	3774.9	3682.6	3561.9	3450.7	3457.8
32.5°	5736.9	4042.4	3311.0	3438.8	3561.9	3595.0	3531.1	3410.4	3237.7	3093.3	3072.0
35°	5647.0	3798.6	3199.8	3327.6	3415.2	3398.6	3337.1	3180.9	3024.7	2896.9	2875.6
37.5°	5632.8	3590.3	3093.3	3202.2	3251.9	3228.2	3152.5	3019.9	2963.1	2866.1	2854.3
40°	5708.5	3443.6	2984.4	3069.6	3093.3	3074.4	2991.5	2915.8	2967.9	2944.2	2944.2
42.5°	5914.4	3365.5	2887.4	2937.1	2956.0	2970.2	2911.1	2847.2	2911.1	2802.2	2766.7
45°	6241.0	3367.8	2799.8	2806.9	2863.7	2913.4	2873.2	2778.5	2745.4	2527.7	2485.1
47.5°	6721.5	3448.3	2728.8	2683.9	2785.6	2868.5	2811.7	2674.4	2527.7	2383.3	2357.3
50°	7282.4	3592.7	2664.9	2556.1	2681.5	2811.7	2769.1	2608.1	2456.7	2369.1	2352.5
52.5°	7904.8	3774.9	2586.8	2414.1	2553.7	2785.6	2778.5	2598.7	2390.4	2331.2	2317.0
55°	8674.0	3954.8	2489.8	2248.4	2440.1	2764.3	2752.5	2520.6	2376.2	2333.6	2328.9
57.5°	9568.7	4215.1	2350.2	2080.3	2309.9	2676.8	2650.7	2473.2	2328.9	2298.1	2295.7
60°	11010.0	4619.8	2151.3	1926.5	2177.4	2522.9	2556.1	2392.8	2253.1	2246.0	2243.7
62.5°	12905.7	5187.9	1945.4	1767.9	2023.5	2324.1	2418.8	2283.9	2172.7	2208.2	2212.9
65°	15523.3	5665.9	1732.4	1633.0	1853.1	2132.4	2288.6	2182.1	2082.7	2151.3	2151.3
67.5°	17229.7	5675.4	1538.4	1493.4	1680.4	1971.5	2151.3	2061.4	1966.7	2082.7	2087.4
70°	16874.7	4972.5	1377.4	1346.7	1512.3	1798.7	1999.9	1928.9	1820.0	1924.1	1886.3
71°	16302.0	4582.0	1313.5	1289.9	1446.1	1715.9	1928.9	1869.7	1760.8	1829.5	1808.2
72.5°	15388.4	3978.5	1209.4	1214.1	1346.7	1611.7	1829.5	1767.9	1659.1	1696.9	1689.8
75°	13007.5	3474.3	1034.3	1055.6	1157.3	1434.2	1630.7	1583.3	1472.1	1472.1	1465.0
77.5°	8132.1	2428.3	859.1	871.0	982.2	1228.3	1401.1	1360.9	1254.4	1218.9	1209.4
80°	3034.1	1254.4	672.1	686.3	755.0	968.0	1159.7	1121.8	1013.0	972.7	934.9
82.5°	1147.9	629.5	494.6	482.8	556.2	738.4	908.8	863.9	778.7	681.6	653.2
85°	433.1	312.4	302.9	293.5	326.6	437.8	563.3	553.8	463.9	395.2	388.1
87.5°	113.6	101.8	118.3	87.6	92.3	82.8	85.2	35.5	16.6	7.1	4.7
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)