

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: P454674

Luminaire Tested: **GALN-SA5D-740-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454674
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-SA5D-740-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38962 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G5

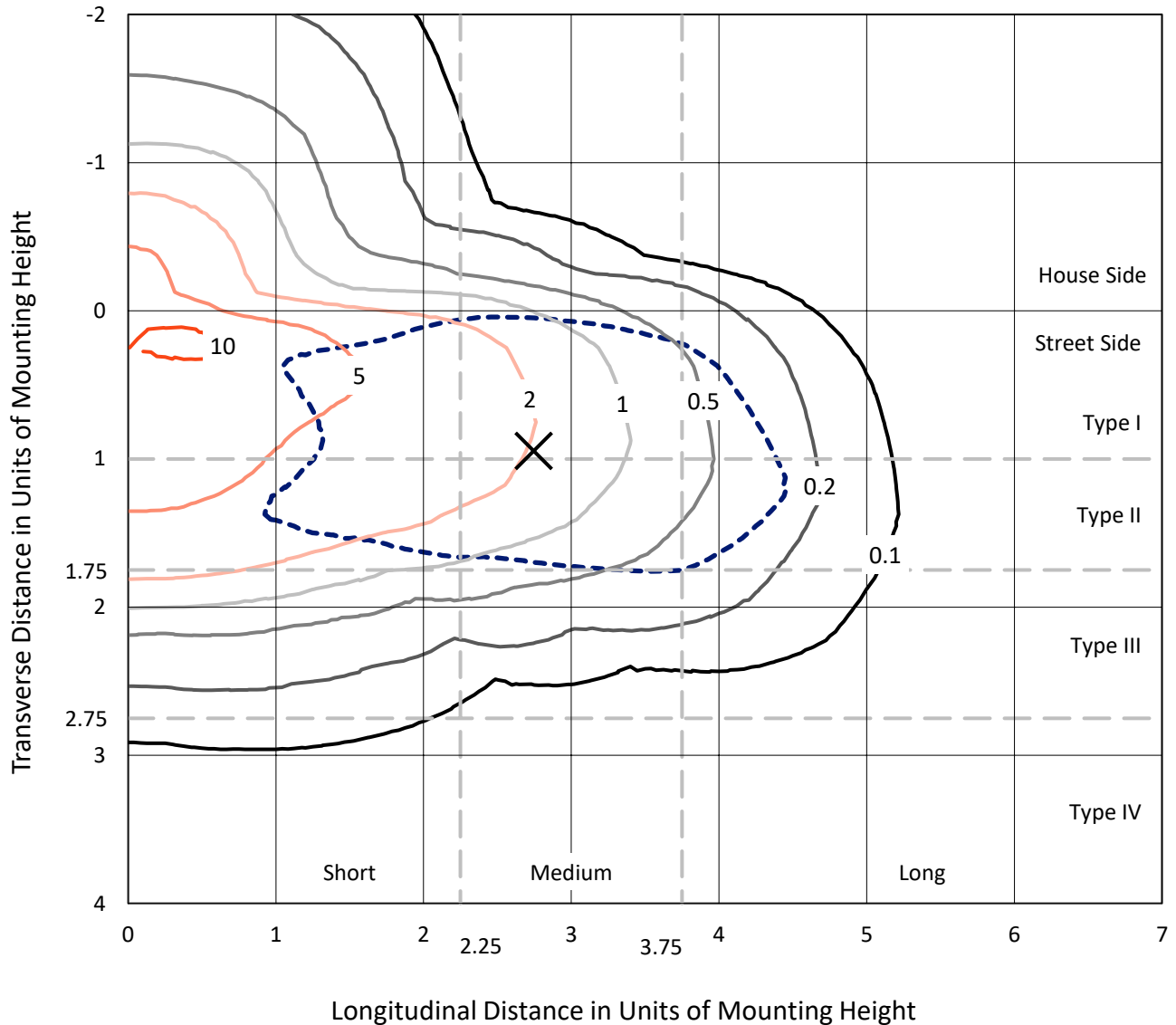
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

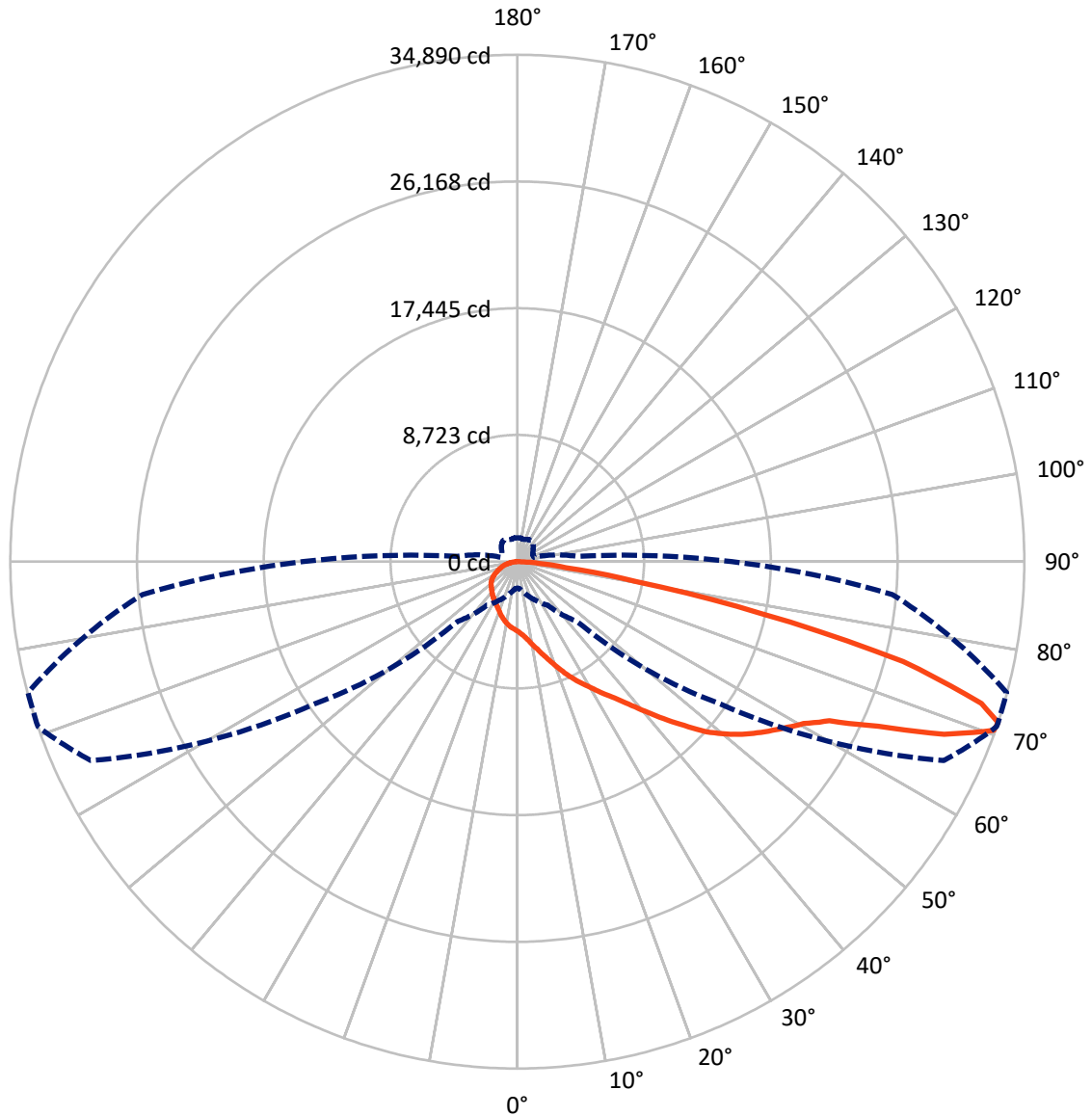
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 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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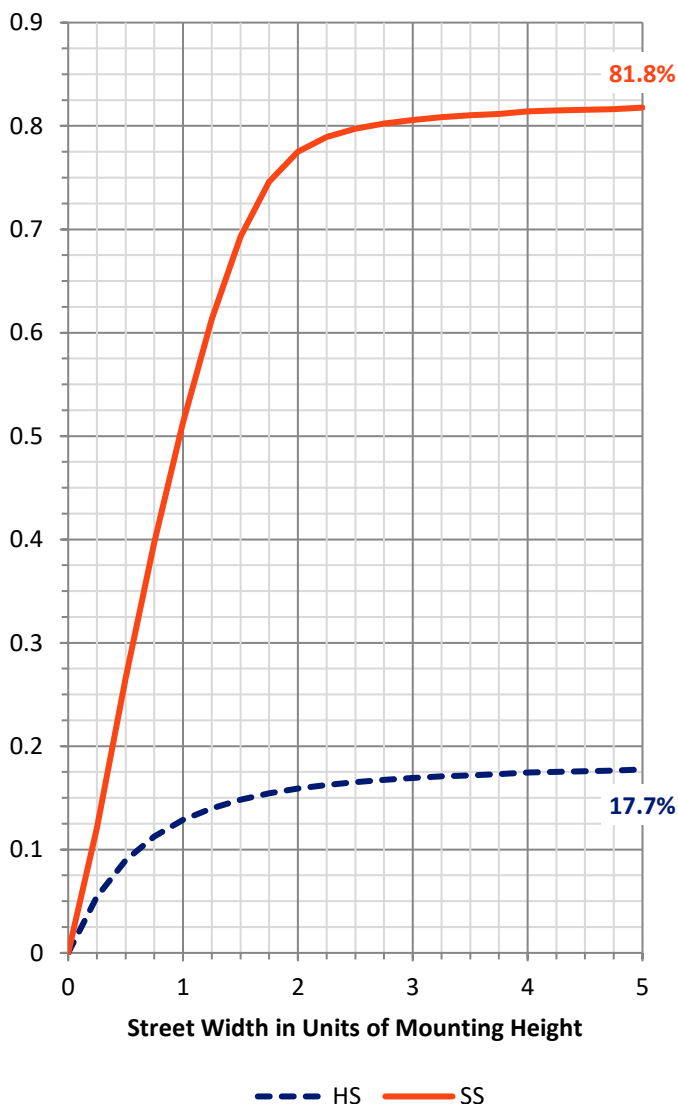
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7007.2	0.0	7007.2
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	31954.8	0.0	31954.8
	% Fixture	82.0	0.0	82.0
Total	Lumens	38962.0	0.0	38962.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.1	1.2
10°-20°	1559.9	4.0
20°-30°	2726.0	7.0
30°-40°	4054.6	10.4
40°-50°	5974.0	15.3
50°-60°	8363.7	21.5
60°-70°	9354.5	24.0
70°-80°	5714.1	14.7
80°-90°	735.1	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°	38962.0	100.0
0°-180°	38962.0	100.0

Coefficient of Utilization



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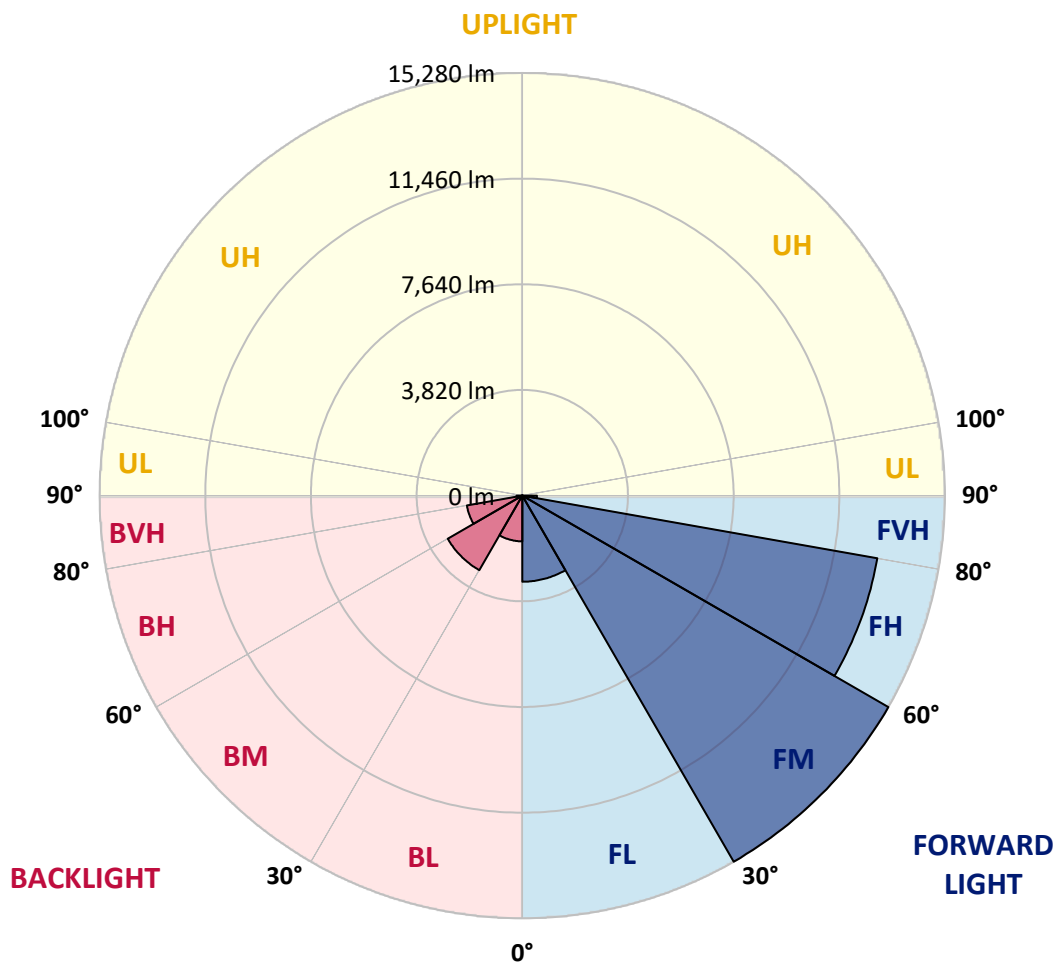
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3113.1	8.0			
FM	(30°-60°)	15280.1	39.2			
FH	(60°-80°)	13032.7	33.4			G5
FVH	(80°-90°)	528.9	1.4			G4/750
BL	(0°-30°)	1653.0	4.2	B3/2500		
BM	(30°-60°)	3112.2	8.0	B3/5000		
BH	(60°-80°)	2035.9	5.2	B3/2500		G3/2500
BVH	(80°-90°)	206.2	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-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8
2.5°	5308.6	5282.9	5285.1	5248.6	5201.5	5150.1	5077.3	5013.1	4961.7	4931.7	4843.9
5°	5882.5	5856.8	5824.7	5745.5	5711.2	5584.9	5424.2	5278.6	5167.3	5105.2	4929.6
7.5°	6347.2	6340.8	6332.2	6287.2	6199.4	6023.8	5886.8	5634.1	5469.2	5351.4	5051.6
10°	6634.2	6644.9	6651.3	6659.9	6623.4	6531.4	6342.9	6023.8	5814.0	5664.1	5210.1
12.5°	6779.8	6790.5	6826.9	6906.1	6955.4	6944.7	6790.5	6477.8	6188.7	5991.7	5379.3
15°	6869.7	6886.8	6951.1	7056.0	7220.9	7325.8	7250.9	6961.8	6644.9	6411.4	5580.6
17.5°	6968.2	6987.5	7058.2	7208.1	7424.3	7651.3	7732.7	7484.3	7139.5	6861.1	5805.4
20°	7023.9	7049.6	7150.2	7347.3	7599.9	7929.7	8199.5	8068.9	7692.0	7383.7	6064.5
22.5°	7113.8	7135.3	7220.9	7430.8	7732.7	8146.0	8666.4	8638.5	8306.6	7908.3	6349.3
25°	7358.0	7392.2	7435.1	7561.4	7852.6	8366.6	9054.0	9246.7	8901.9	8456.5	6610.6
27.5°	7818.4	7846.2	7844.1	7861.2	8026.1	8557.2	9390.2	9848.4	9493.0	9011.1	6863.3
30°	8343.0	8353.7	8362.3	8323.7	8360.1	8752.0	9698.5	10443.8	10088.3	9580.8	7083.9
32.5°	8981.2	9002.6	8929.8	8831.3	8801.3	9041.1	9953.4	11039.1	10792.8	10159.0	7302.3
35°	9734.9	9790.6	9642.9	9469.4	9347.3	9456.6	10296.0	11647.2	11514.5	10897.7	7591.4
37.5°	10595.8	10664.3	10527.3	10186.8	10013.3	10043.3	10743.6	12398.9	12426.7	11739.3	8021.8
40°	11300.3	11390.3	11394.6	10912.7	10649.3	10683.6	11311.0	13208.4	13527.4	12780.1	8529.3
42.5°	11765.0	11852.8	11944.9	11662.2	11386.0	11580.9	11972.7	14086.3	14765.2	14043.5	9238.1
45°	12274.7	12353.9	12405.3	12276.8	12122.6	12628.0	12771.5	15020.0	16084.3	15454.7	10013.3
47.5°	12865.7	12953.5	13002.8	12880.7	12822.9	13546.7	13632.4	15891.6	17493.4	16825.2	10869.9
50°	13653.8	13720.2	13694.5	13617.4	13604.5	14251.2	14458.9	16707.5	18656.2	18300.7	11758.6
52.5°	14634.5	14713.8	14741.6	14632.4	14583.1	14754.5	15124.9	17450.5	19714.0	19568.4	12707.3
55°	15227.7	15354.1	15778.1	15949.4	16067.2	15405.5	15842.3	18270.7	20662.7	20904.7	13726.6
57.5°	14467.5	14630.3	15578.9	16435.5	17542.6	17032.9	16859.5	19127.3	21611.3	22200.2	14947.2
60°	12613.0	12649.4	13872.2	15450.4	17677.5	19125.1	18981.7	20489.2	22639.2	23506.5	16555.4
62.5°	8749.9	8827.0	10272.4	12790.8	16011.5	19878.9	22592.1	22840.5	24112.5	25461.6	18913.1
65°	4512.0	4411.3	5728.3	8038.9	12071.3	18088.7	25517.3	27164.1	27307.5	28519.6	22232.3
67.5°	2777.4	2822.4	3439.1	4694.0	7137.4	13146.2	25211.1	32447.0	31691.0	32273.5	25313.9
70°	2085.8	2141.4	2565.4	3212.1	4351.4	7516.4	20275.1	33727.5	34783.3	34633.4	26251.8
71°	1813.8	1871.6	2312.7	2923.1	3655.4	5801.1	17082.2	32387.0	34890.3	34864.6	25898.5
72.5°	1546.1	1582.5	1927.3	2475.5	3081.5	4066.6	12833.6	29046.4	33402.1	34256.5	24637.2
75°	1214.2	1242.0	1396.2	1888.7	2426.2	2496.9	6886.8	21776.2	27433.9	29061.4	20510.6
77.5°	989.3	1008.6	1087.8	1402.6	1871.6	1768.8	3612.6	14174.1	17187.1	18825.3	12082.0
80°	785.9	807.3	854.4	950.8	1402.6	1261.3	1723.9	7182.4	8302.3	8285.2	4822.5
82.5°	610.3	616.7	672.4	698.1	959.4	895.1	933.7	3040.8	3368.5	3479.8	1741.0
85°	385.5	404.7	595.3	535.4	573.9	524.7	460.4	1207.8	1488.3	1466.9	696.0
87.5°	117.8	124.2	201.3	227.0	254.8	229.1	169.2	355.5	434.7	471.1	173.5
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°	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8	4781.8
2.5°	4809.7	4786.1	4702.6	4634.1	4569.8	4499.1	4439.2	4422.1	4407.1	4400.6	4398.5
5°	4854.6	4784.0	4619.1	4484.2	4377.1	4278.6	4216.5	4188.6	4160.8	4160.8	4169.4
7.5°	4918.9	4790.4	4535.6	4334.3	4199.3	4107.3	4062.3	4058.0	4064.4	4070.9	4073.0
10°	4989.5	4786.1	4413.5	4162.9	4043.0	4000.2	4002.3	4038.7	4073.0	4098.7	4103.0
12.5°	5058.1	4760.4	4270.0	4002.3	3925.2	3933.8	3993.8	4075.1	4141.5	4177.9	4180.1
15°	5135.2	4719.7	4096.6	3850.3	3824.6	3891.0	4002.3	4126.5	4227.2	4287.1	4293.6
17.5°	5199.4	4651.2	3914.5	3702.5	3734.7	3856.7	4010.9	4171.5	4293.6	4368.5	4381.4
20°	5272.2	4563.4	3726.1	3561.2	3653.3	3818.2	3993.8	4167.2	4293.6	4366.4	4383.5
22.5°	5330.0	4439.2	3546.2	3445.6	3580.5	3771.1	3936.0	4075.1	4177.9	4216.5	4242.2
25°	5353.6	4282.9	3377.0	3351.3	3522.7	3694.0	3805.3	3884.6	3916.7	3912.4	3923.1
27.5°	5340.7	4103.0	3231.4	3276.4	3449.8	3574.0	3629.7	3623.3	3565.5	3511.9	3537.6
30°	5287.2	3888.8	3109.4	3199.3	3355.6	3424.1	3415.6	3332.1	3222.9	3122.2	3128.6
32.5°	5190.8	3657.6	2995.9	3111.5	3222.9	3252.8	3195.0	3085.8	2929.5	2798.9	2779.6
35°	5109.5	3437.0	2895.2	3010.9	3090.1	3075.1	3019.4	2878.1	2736.7	2621.1	2601.8
37.5°	5096.6	3248.6	2798.9	2897.4	2942.3	2920.9	2852.4	2732.5	2681.1	2593.3	2582.6
40°	5165.1	3115.8	2700.3	2777.4	2798.9	2781.7	2706.8	2638.2	2685.4	2663.9	2663.9
42.5°	5351.4	3045.1	2612.5	2657.5	2674.6	2687.5	2634.0	2576.1	2634.0	2535.5	2503.3
45°	5647.0	3047.3	2533.3	2539.7	2591.1	2636.1	2599.7	2514.0	2484.1	2287.0	2248.5
47.5°	6081.7	3120.1	2469.1	2428.4	2520.5	2595.4	2544.0	2419.8	2287.0	2156.4	2132.9
50°	6589.2	3250.7	2411.3	2312.7	2426.2	2544.0	2505.5	2359.9	2222.8	2143.6	2128.6
52.5°	7152.4	3415.6	2340.6	2184.3	2310.6	2520.5	2514.0	2351.3	2162.8	2109.3	2096.5
55°	7848.3	3578.3	2252.8	2034.4	2207.8	2501.2	2490.5	2280.6	2150.0	2111.5	2107.2
57.5°	8657.8	3813.9	2126.4	1882.3	2090.0	2422.0	2398.4	2237.8	2107.2	2079.3	2077.2
60°	9961.9	4180.1	1946.6	1743.1	1970.1	2282.8	2312.7	2165.0	2038.6	2032.2	2030.1
62.5°	11677.2	4694.0	1760.3	1599.6	1830.9	2102.9	2188.5	2066.5	1965.8	1998.0	2002.2
65°	14045.7	5126.6	1567.5	1477.6	1676.7	1929.4	2070.8	1974.4	1884.5	1946.6	1946.6
67.5°	15589.6	5135.2	1391.9	1351.2	1520.4	1783.8	1946.6	1865.2	1779.5	1884.5	1888.7
70°	15268.4	4499.1	1246.3	1218.5	1368.4	1627.5	1809.5	1745.3	1646.8	1741.0	1706.7
71°	14750.2	4145.8	1188.5	1167.1	1308.4	1552.5	1745.3	1691.7	1593.2	1655.3	1636.1
72.5°	13923.6	3599.7	1094.3	1098.6	1218.5	1458.3	1655.3	1599.6	1501.1	1535.4	1529.0
75°	11769.3	3143.6	935.8	955.1	1047.2	1297.7	1475.4	1432.6	1332.0	1332.0	1325.5
77.5°	7358.0	2197.1	777.3	788.0	888.7	1111.4	1267.7	1231.3	1135.0	1102.8	1094.3
80°	2745.3	1135.0	608.2	621.0	683.1	875.8	1049.3	1015.0	916.5	880.1	845.9
82.5°	1038.6	569.6	447.6	436.9	503.2	668.1	822.3	781.6	704.5	616.7	591.0
85°	391.9	282.7	274.1	265.5	295.5	396.2	509.7	501.1	419.7	357.6	351.2
87.5°	102.8	92.1	107.1	79.2	83.5	75.0	77.1	32.1	15.0	6.4	4.3
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)