

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: P456530

Luminaire Tested: **GALN-SA7D-740-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456530
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-740-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 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: 54189 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

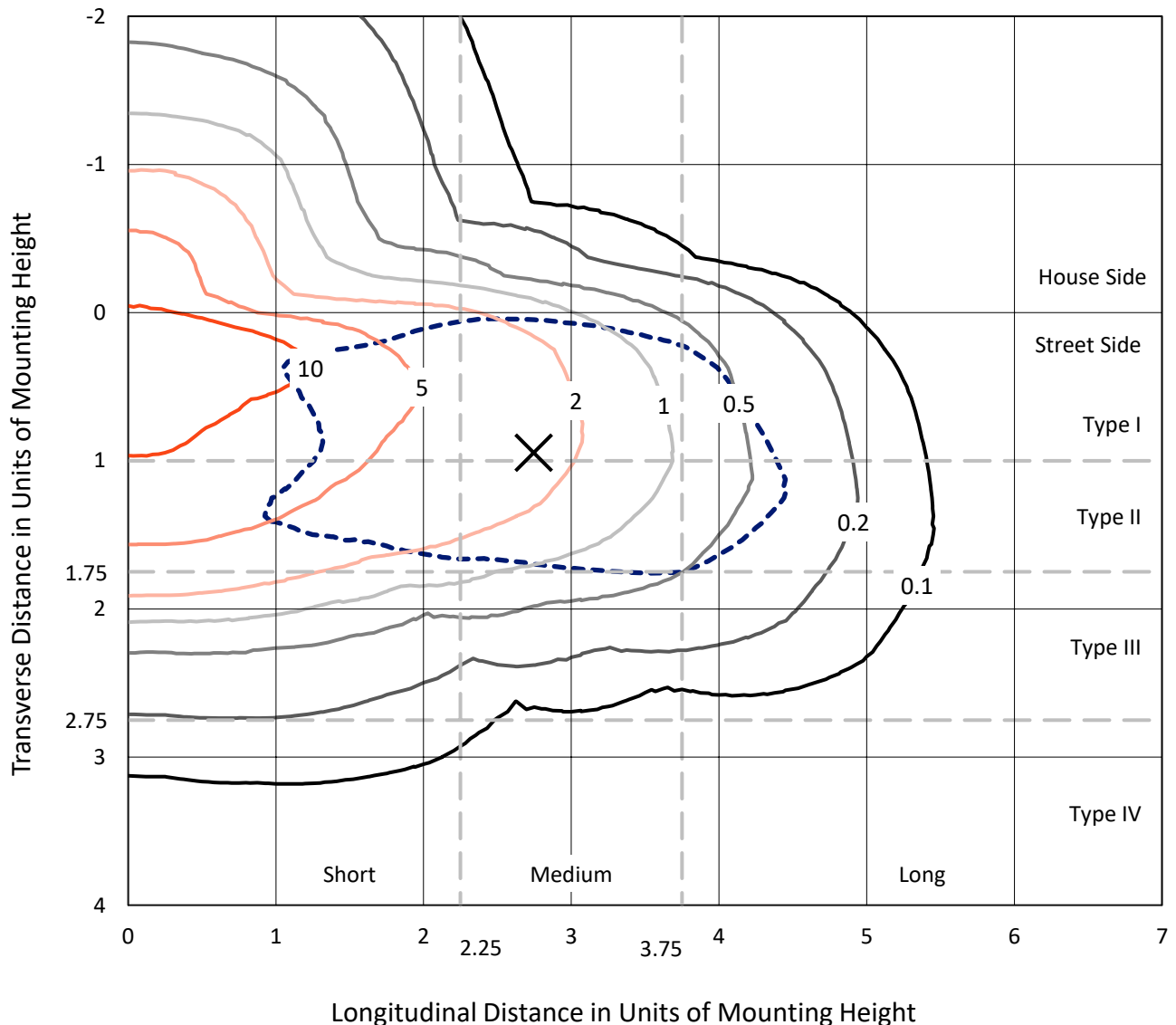
Input Watts (W): 433
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

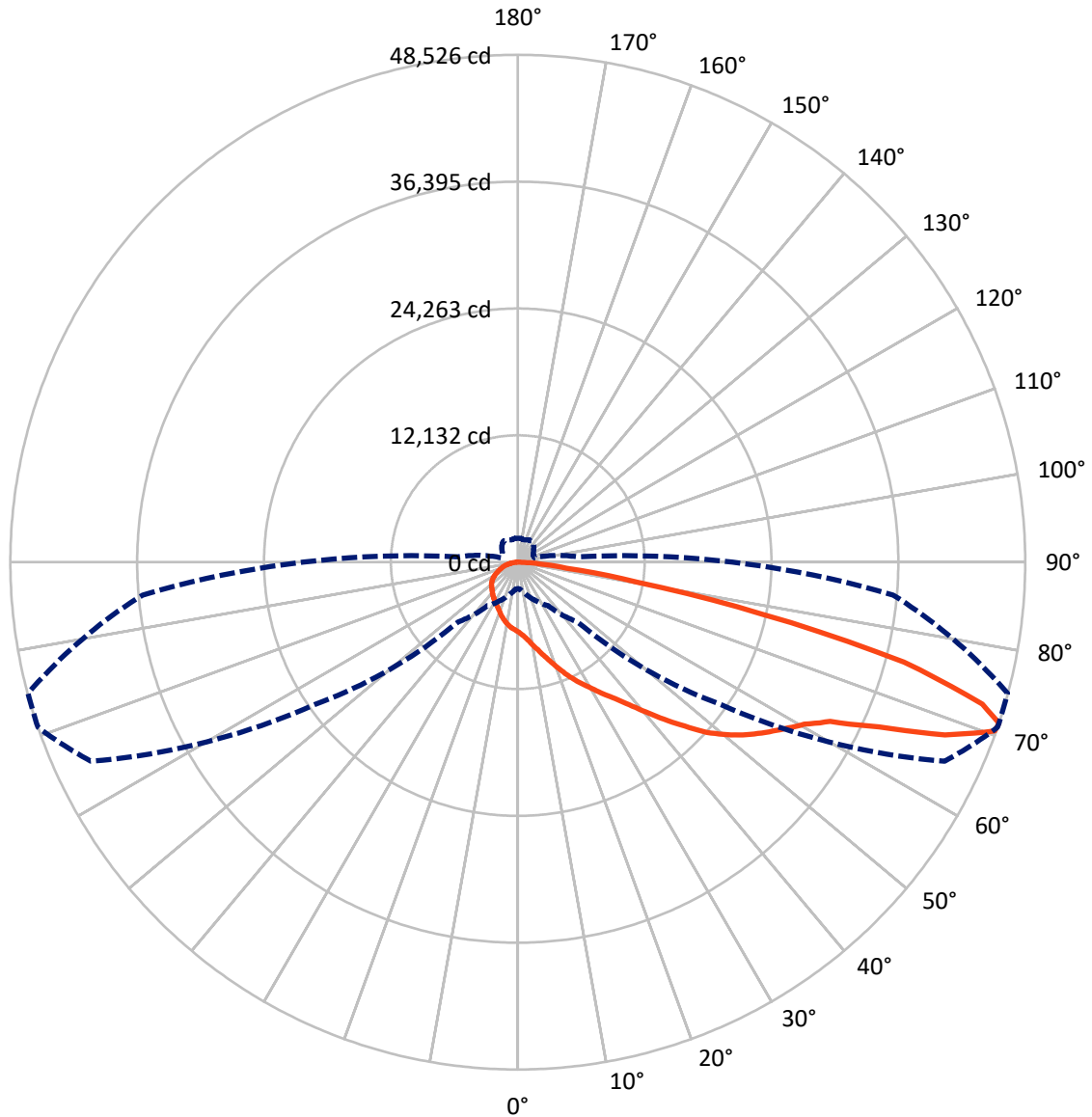
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.1 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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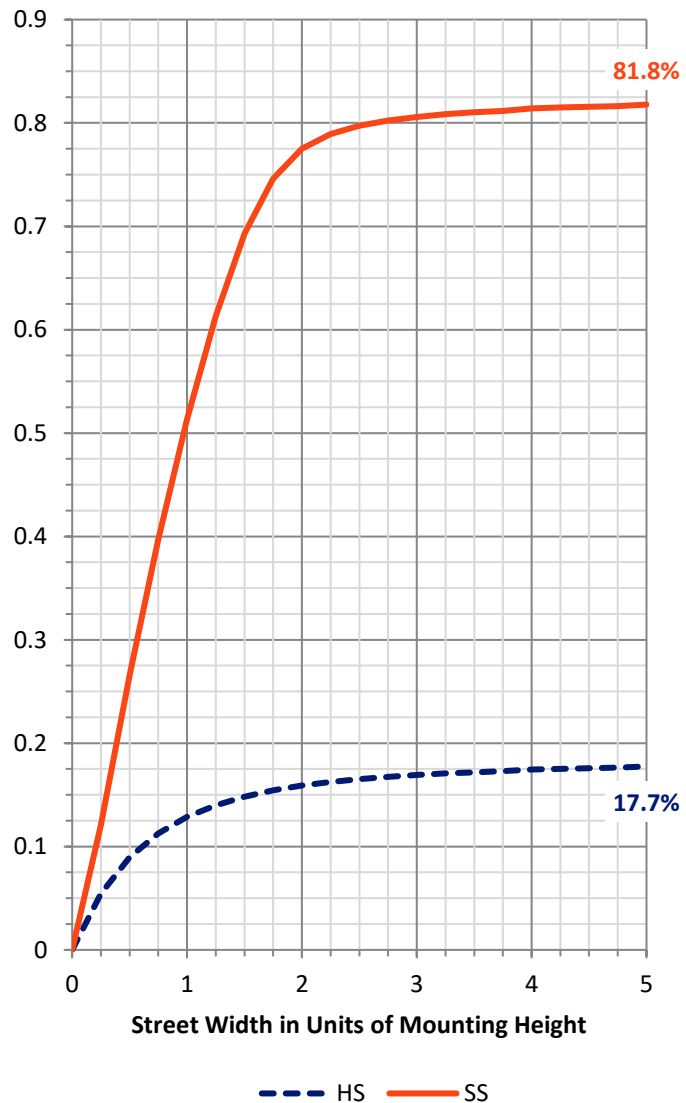
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9745.7	0.0	9745.7
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	44443.2	0.0	44443.2
	% Fixture	82.0	0.0	82.0
Total	Lumens	54189.0	0.0	54189.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	667.8	1.2
10°-20°	2169.5	4.0
20°-30°	3791.4	7.0
30°-40°	5639.3	10.4
40°-50°	8308.7	15.3
50°-60°	11632.3	21.5
60°-70°	13010.4	24.0
70°-80°	7947.2	14.7
80°-90°	1022.3	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°	54189.0	100.0
0°-180°	54189.0	100.0



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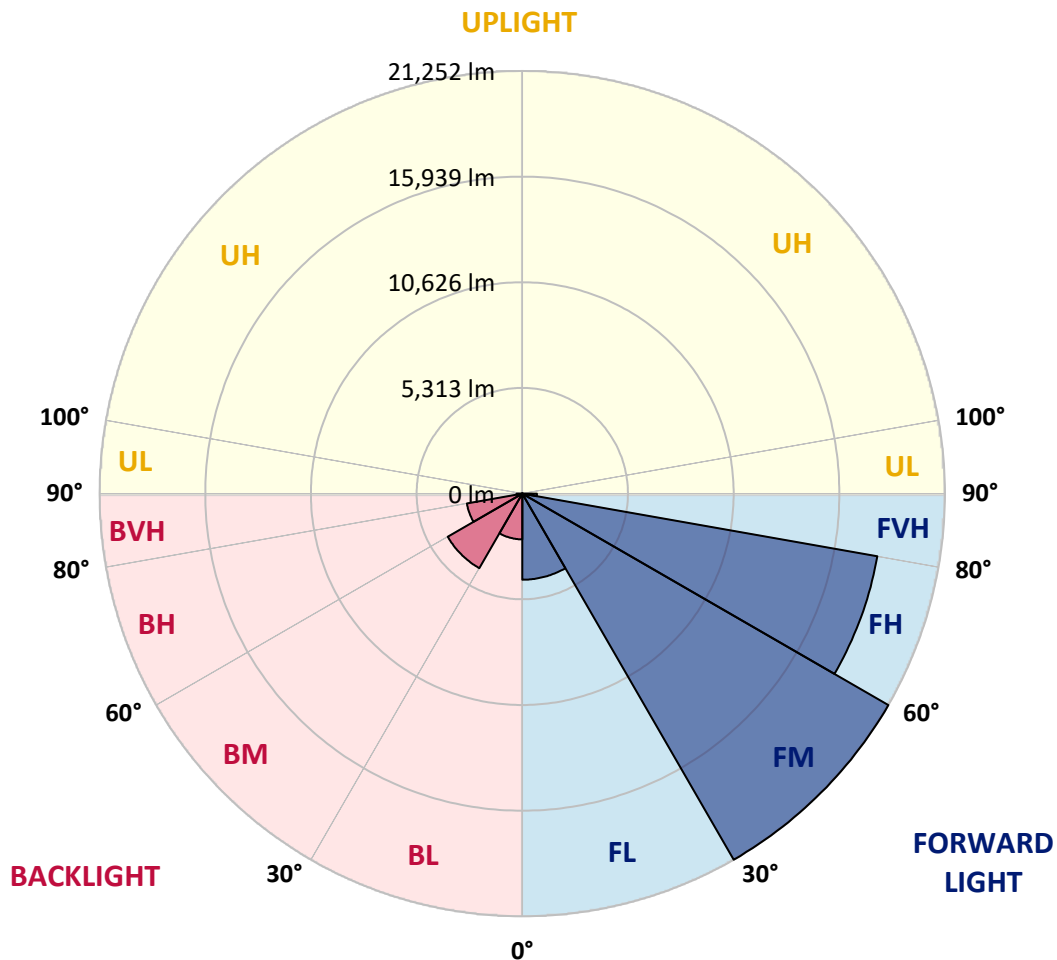
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4329.7	8.0			
FM	(30°-60°)	21251.9	39.2			
FH	(60°-80°)	18126.1	33.4			G5
FVH	(80°-90°)	735.6	1.4			G4/750
BL	(0°-30°)	2299.0	4.2	B3/2500		
BM	(30°-60°)	4328.5	8.0	B3/5000		
BH	(60°-80°)	2831.6	5.2	B4/5000		G4/5000
BVH	(80°-90°)	286.7	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6
2.5°	7383.3	7347.6	7350.5	7299.9	7234.4	7162.9	7061.6	6972.3	6900.8	6859.1	6737.0
5°	8181.5	8145.8	8101.1	7990.9	7943.2	7767.5	7544.1	7341.6	7186.7	7100.4	6856.1
7.5°	8827.8	8818.9	8806.9	8744.4	8622.3	8378.1	8187.5	7836.0	7606.7	7442.9	7025.9
10°	9226.9	9241.8	9250.7	9262.6	9212.0	9083.9	8821.8	8378.1	8086.2	7877.7	7246.3
12.5°	9429.4	9444.3	9494.9	9605.1	9673.6	9658.8	9444.3	9009.5	8607.4	8333.4	7481.6
15°	9554.5	9578.3	9667.7	9813.6	10043.0	10188.9	10084.7	9682.6	9241.8	8917.1	7761.6
17.5°	9691.5	9718.3	9816.6	10025.1	10325.9	10641.6	10754.8	10409.3	9929.8	9542.6	8074.3
20°	9769.0	9804.7	9944.7	10218.7	10570.1	11028.8	11404.1	11222.4	10698.2	10269.3	8434.7
22.5°	9894.0	9923.8	10043.0	10334.8	10754.8	11329.6	12053.3	12014.6	11553.0	10999.0	8830.8
25°	10233.6	10281.2	10340.8	10516.5	10921.6	11636.4	12592.4	12860.5	12381.0	11761.5	9194.1
27.5°	10873.9	10912.6	10909.7	10933.5	11162.8	11901.4	13060.0	13697.4	13203.0	12532.9	9545.6
30°	11603.6	11618.5	11630.4	11576.8	11627.4	12172.5	13488.9	14525.4	14031.0	13325.1	9852.3
32.5°	12491.2	12520.9	12419.7	12282.7	12241.0	12574.5	13843.3	15353.3	15010.8	14129.2	10156.1
35°	13539.5	13617.0	13411.5	13170.2	13000.4	13152.3	14319.9	16199.2	16014.5	15156.8	10558.2
37.5°	14736.8	14832.1	14641.5	14168.0	13926.7	13968.4	14942.3	17244.6	17283.3	16327.3	11156.9
40°	15716.7	15841.8	15847.7	15177.6	14811.3	14858.9	15731.6	18370.4	18814.2	17774.7	11862.7
42.5°	16363.0	16485.1	16613.2	16220.0	15835.8	16106.9	16651.9	19591.5	20535.6	19531.9	12848.6
45°	17071.8	17182.0	17253.5	17074.8	16860.4	17563.3	17762.8	20890.1	22370.3	21494.7	13926.7
47.5°	17893.9	18016.0	18084.5	17914.7	17834.3	18841.0	18960.1	22102.3	24330.1	23400.8	15118.0
50°	18989.9	19082.2	19046.5	18939.3	18921.4	19820.8	20109.7	23237.0	25947.3	25452.9	16354.1
52.5°	20354.0	20464.2	20502.9	20351.0	20282.5	20520.8	21036.0	24270.5	27418.6	27216.1	17673.5
55°	21179.0	21354.7	21944.4	22182.7	22346.5	21426.2	22033.8	25411.2	28738.0	29074.5	19091.2
57.5°	20121.7	20348.0	21667.4	22858.8	24398.6	23689.7	23448.5	26602.5	30057.4	30876.4	20788.8
60°	17542.4	17593.0	19293.7	21488.7	24586.2	26599.5	26400.0	28496.7	31487.0	32693.2	23025.5
62.5°	12169.5	12276.7	14287.1	17789.6	22269.0	27647.9	31421.5	31767.0	33536.1	35412.5	26304.7
65°	6275.4	6135.4	7967.1	11180.7	16788.9	25158.0	35489.9	37780.2	37979.8	39665.5	30921.1
67.5°	3862.9	3925.5	4783.2	6528.5	9926.8	18284.0	35064.0	45127.8	44076.4	44886.5	35206.9
70°	2900.9	2978.3	3568.1	4467.5	6052.0	10454.0	28198.9	46908.8	48377.2	48168.7	36511.5
71°	2522.7	2603.1	3216.6	4065.4	5084.0	8068.3	23758.2	45044.4	48526.1	48490.3	36020.0
72.5°	2150.4	2201.0	2680.5	3443.0	4285.8	5655.9	17849.2	40398.2	46456.1	47644.5	34265.8
75°	1688.7	1727.4	1941.9	2626.9	3374.5	3472.7	9578.3	30286.7	38155.5	40419.0	28526.5
77.5°	1376.0	1402.8	1513.0	1950.8	2603.1	2460.1	5024.5	19713.6	23904.1	26182.6	16803.8
80°	1093.1	1122.8	1188.4	1322.4	1950.8	1754.2	2397.6	9989.3	11547.0	11523.2	6707.2
82.5°	848.8	857.8	935.2	970.9	1334.3	1244.9	1298.6	4229.2	4684.9	4839.8	2421.4
85°	536.1	562.9	828.0	744.6	798.2	729.7	640.3	1679.8	2069.9	2040.2	968.0
87.5°	163.8	172.7	280.0	315.7	354.4	318.7	235.3	494.4	604.6	655.2	241.2
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°	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6	6650.6
2.5°	6689.3	6656.6	6540.4	6445.1	6355.8	6257.5	6174.1	6150.3	6129.4	6120.5	6117.5
5°	6751.9	6653.6	6424.3	6236.6	6087.7	5950.7	5864.3	5825.6	5786.9	5786.9	5798.8
7.5°	6841.2	6662.5	6308.1	6028.2	5840.5	5712.5	5649.9	5644.0	5652.9	5661.8	5664.8
10°	6939.5	6656.6	6138.4	5789.9	5623.1	5563.5	5566.5	5617.1	5664.8	5700.5	5706.5
12.5°	7034.8	6620.8	5938.8	5566.5	5459.3	5471.2	5554.6	5667.8	5760.1	5810.7	5813.7
15°	7142.1	6564.3	5697.6	5355.1	5319.3	5411.6	5566.5	5739.3	5879.2	5962.6	5971.6
17.5°	7231.4	6469.0	5444.4	5149.5	5194.2	5364.0	5578.4	5801.8	5971.6	6075.8	6093.7
20°	7332.7	6346.8	5182.3	4953.0	5081.0	5310.4	5554.6	5795.8	5971.6	6072.8	6096.7
22.5°	7413.1	6174.1	4932.1	4792.1	4979.8	5244.9	5474.2	5667.8	5810.7	5864.3	5900.1
25°	7445.8	5956.7	4696.8	4661.1	4899.4	5137.6	5292.5	5402.7	5447.4	5441.4	5456.3
27.5°	7428.0	5706.5	4494.3	4556.9	4798.1	4970.8	5048.3	5039.3	4958.9	4884.5	4920.2
30°	7353.5	5408.7	4324.5	4449.6	4667.1	4762.4	4750.5	4634.3	4482.4	4342.4	4351.4
32.5°	7219.5	5087.0	4166.7	4327.5	4482.4	4524.1	4443.7	4291.8	4074.4	3892.7	3865.9
35°	7106.3	4780.2	4026.7	4187.5	4297.7	4276.9	4199.5	4002.9	3806.3	3645.5	3618.7
37.5°	7088.4	4518.1	3892.7	4029.7	4092.2	4062.5	3967.1	3800.4	3728.9	3606.8	3591.9
40°	7183.8	4333.5	3755.7	3862.9	3892.7	3868.9	3764.6	3669.3	3734.8	3705.1	3705.1
42.5°	7442.9	4235.2	3633.6	3696.1	3719.9	3737.8	3663.4	3582.9	3663.4	3526.4	3481.7
45°	7853.9	4238.2	3523.4	3532.3	3603.8	3666.3	3615.7	3496.6	3454.9	3180.9	3127.3
47.5°	8458.5	4339.4	3434.0	3377.4	3505.5	3609.7	3538.3	3365.5	3180.9	2999.2	2966.4
50°	9164.3	4521.1	3353.6	3216.6	3374.5	3538.3	3484.7	3282.1	3091.5	2981.3	2960.5
52.5°	9947.7	4750.5	3255.3	3037.9	3213.6	3505.5	3496.6	3270.2	3008.1	2933.7	2915.8
55°	10915.6	4976.8	3133.2	2829.4	3070.7	3478.7	3463.8	3171.9	2990.3	2936.6	2930.7
57.5°	12041.4	5304.4	2957.5	2618.0	2906.9	3368.5	3335.7	3112.4	2930.7	2892.0	2889.0
60°	13855.2	5813.7	2707.3	2424.4	2740.1	3174.9	3216.6	3011.1	2835.4	2826.4	2823.5
62.5°	16240.9	6528.5	2448.2	2224.8	2546.5	2924.7	3043.9	2874.1	2734.1	2778.8	2784.7
65°	19534.9	7130.1	2180.1	2055.1	2332.0	2683.5	2880.1	2746.0	2620.9	2707.3	2707.3
67.5°	21682.3	7142.1	1935.9	1879.3	2114.6	2481.0	2707.3	2594.1	2475.0	2620.9	2626.9
70°	21235.6	6257.5	1733.4	1694.7	1903.2	2263.5	2516.7	2427.3	2290.3	2421.4	2373.7
71°	20514.8	5766.1	1653.0	1623.2	1819.8	2159.3	2427.3	2352.9	2215.9	2302.3	2275.5
72.5°	19365.2	5006.6	1521.9	1527.9	1694.7	2028.2	2302.3	2224.8	2087.8	2135.5	2126.5
75°	16369.0	4372.2	1301.5	1328.3	1456.4	1804.9	2052.1	1992.5	1852.5	1852.5	1843.6
77.5°	10233.6	3055.8	1081.1	1096.0	1236.0	1545.8	1763.2	1712.5	1578.5	1533.8	1521.9
80°	3818.2	1578.5	845.8	863.7	950.1	1218.1	1459.4	1411.7	1274.7	1224.1	1176.4
82.5°	1444.5	792.2	622.5	607.6	699.9	929.2	1143.7	1087.1	979.9	857.8	822.0
85°	545.0	393.1	381.2	369.3	411.0	551.0	708.8	696.9	583.8	497.4	488.4
87.5°	143.0	128.1	148.9	110.2	116.2	104.2	107.2	44.7	20.8	8.9	6.0
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)