

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: P191237

Luminaire Tested: **GLEON-AF-09-LED-E1-SL4-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191237
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24294)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-09-LED-E1-SL4-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34080.6 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G5

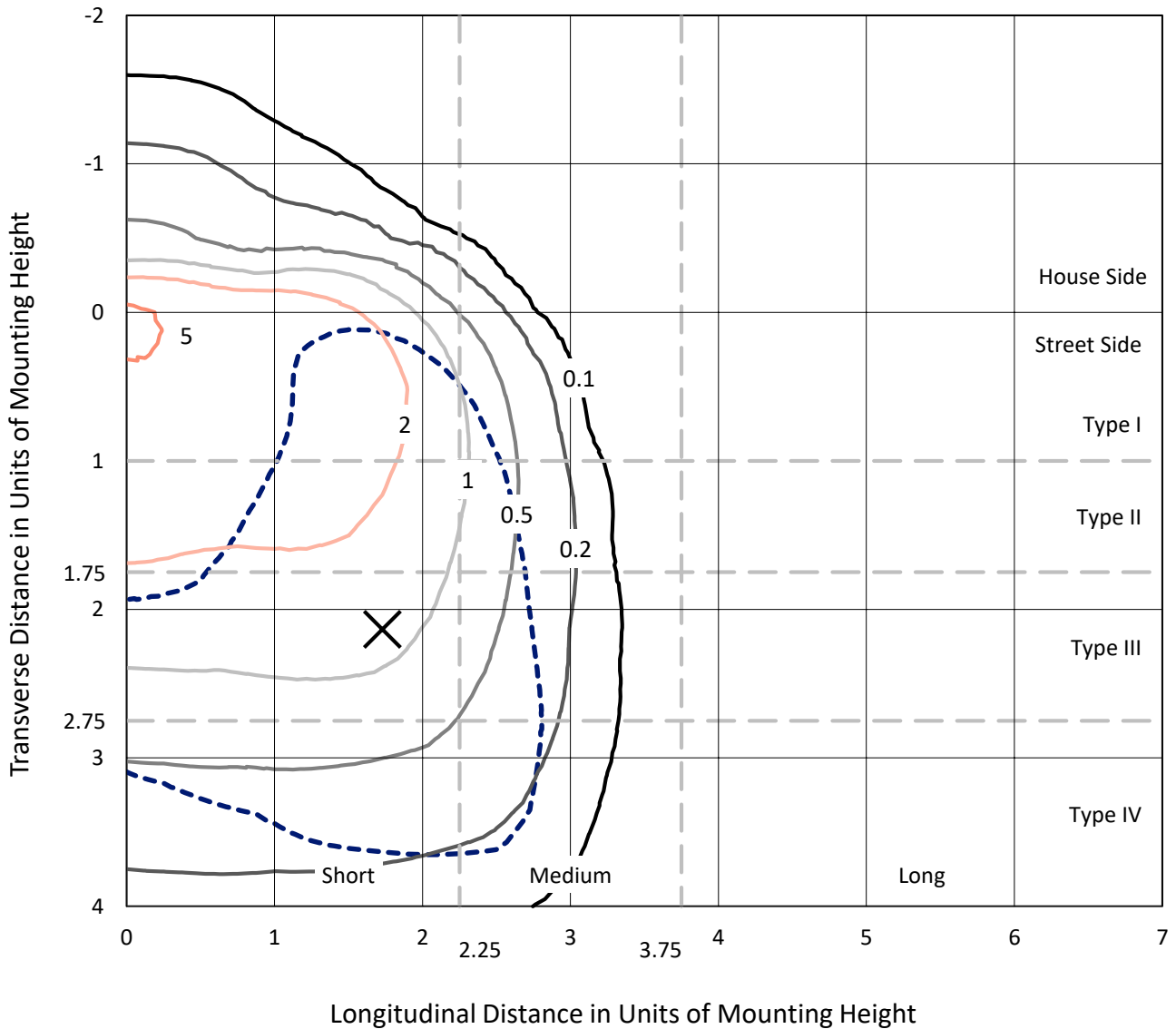
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

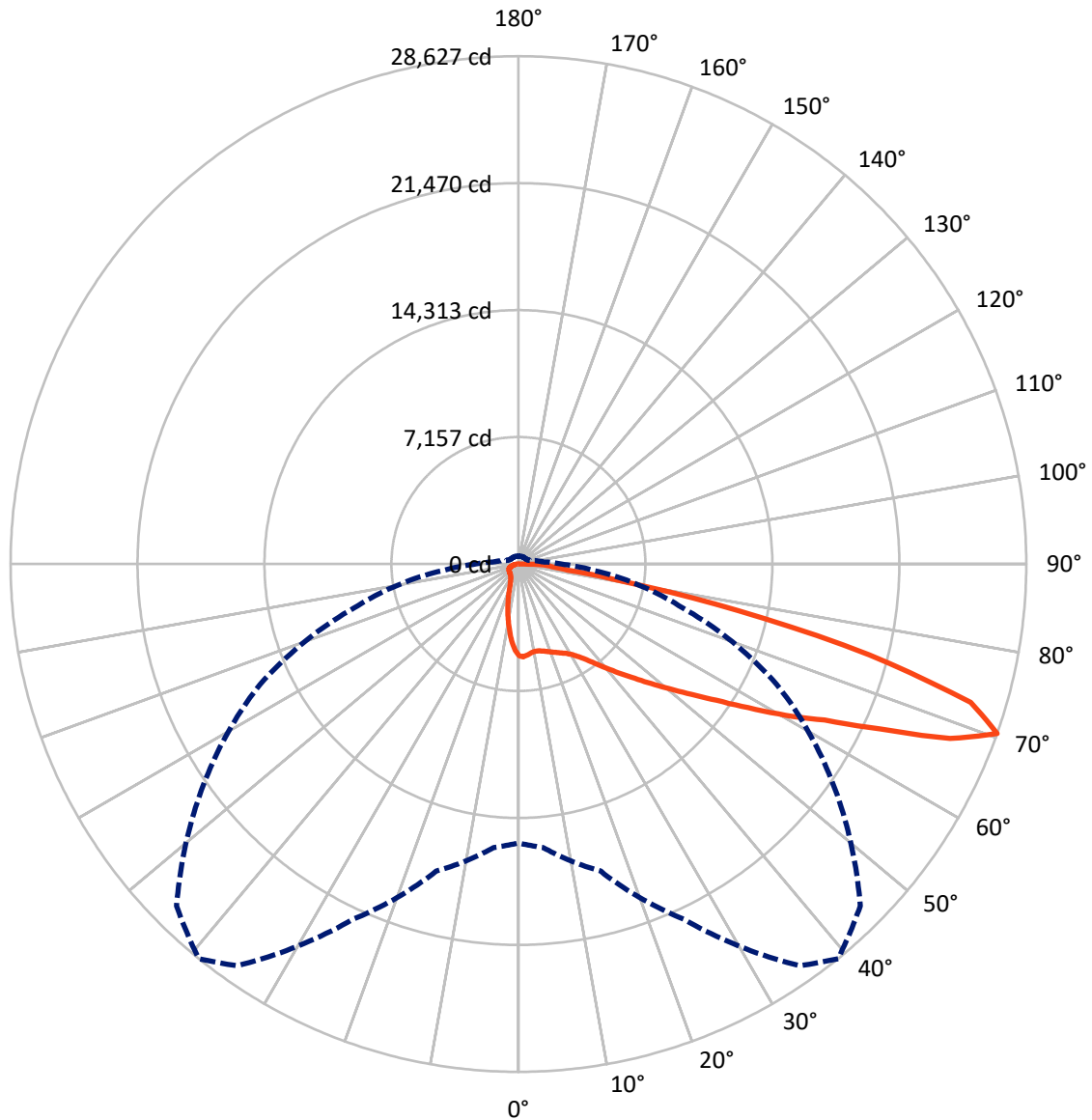
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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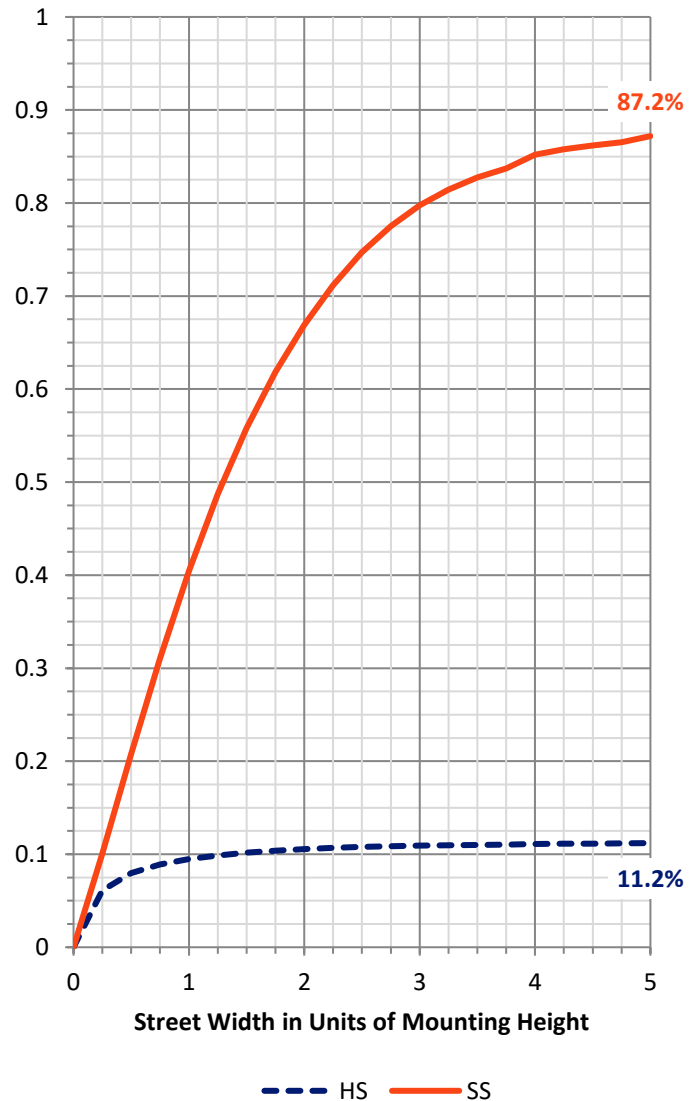
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3876.1	0.0	3876.1
	% Fixture	11.4	0.0	11.4
Street Side	Lumens	30204.5	0.0	30204.5
	% Fixture	88.6	0.0	88.6
Total	Lumens	34080.6	0.0	34080.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.0	1.3
10°-20°	1109.9	3.3
20°-30°	1728.1	5.1
30°-40°	2692.1	7.9
40°-50°	4519.6	13.3
50°-60°	7179.8	21.1
60°-70°	9577.0	28.1
70°-80°	5783.3	17.0
80°-90°	1046.7	3.1
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°	34080.6	100.0
0°-180°	34080.6	100.0



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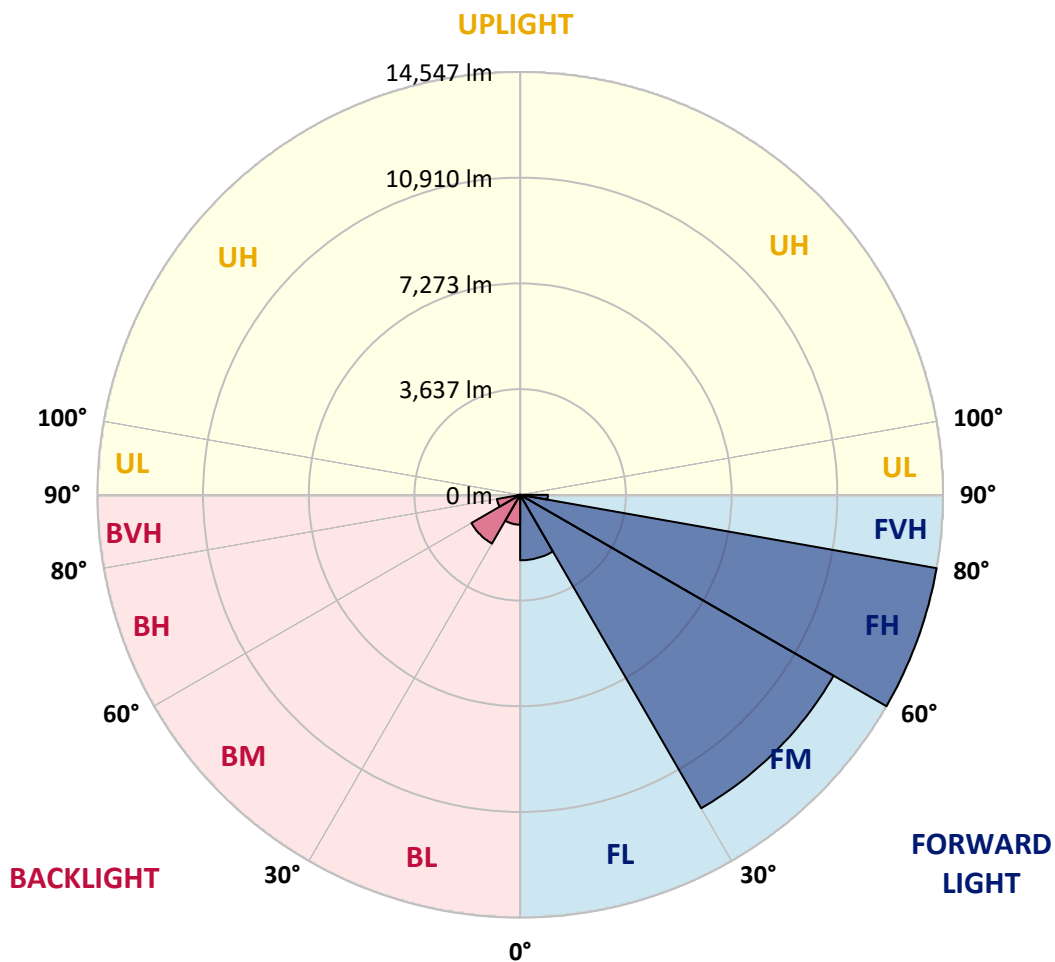
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2253.8	6.6			
FM	(30°-60°)	12451.7	36.5			
FH	(60°-80°)	14546.6	42.7			G5
FVH	(80°-90°)	952.4	2.8			G5
BL	(0°-30°)	1028.3	3.0	B3/2500		
BM	(30°-60°)	1939.8	5.7	B2/2500		
BH	(60°-80°)	813.8	2.4	B2/1000		G2/1000
BVH	(80°-90°)	94.3	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0
2.5°	5274.4	5272.7	5258.9	5248.5	5239.9	5236.4	5243.2	5217.3	5194.7	5167.0	5137.6
5°	5234.6	5232.9	5210.4	5189.5	5168.8	5161.8	5160.1	5113.3	5085.6	5044.0	4988.5
7.5°	5191.3	5182.7	5153.2	5118.5	5082.1	5064.8	5047.4	4986.8	4955.7	4914.1	4849.9
10°	5146.3	5135.8	5108.1	5073.4	5038.9	5012.9	4983.4	4924.5	4891.5	4860.3	4785.9
12.5°	5099.4	5090.8	5083.9	5068.3	5044.0	5021.5	4999.0	4948.7	4914.1	4877.6	4791.0
15°	5092.6	5089.1	5104.6	5115.1	5101.1	5087.3	5063.1	5019.7	4983.4	4947.0	4834.4
17.5°	5148.0	5146.3	5186.1	5213.8	5206.9	5182.7	5149.7	5101.1	5071.7	5040.6	4900.2
20°	5269.2	5277.9	5326.4	5362.8	5328.1	5293.6	5239.9	5172.2	5156.6	5142.8	4967.8
22.5°	5498.0	5506.6	5541.3	5555.1	5465.1	5414.8	5340.3	5253.7	5243.2	5253.7	5049.2
25°	5855.0	5846.3	5841.0	5789.1	5624.5	5546.5	5451.2	5361.1	5366.3	5413.0	5163.5
27.5°	6328.0	6281.2	6208.4	6052.5	5790.8	5704.2	5588.1	5504.9	5537.8	5628.0	5335.1
30°	6818.4	6766.3	6598.2	6343.5	6009.1	5913.9	5783.9	5690.4	5777.0	5919.0	5563.8
32.5°	7272.4	7265.4	7019.4	6691.8	6310.7	6227.5	6097.5	5991.8	6132.2	6348.7	5906.9
35°	7767.9	7783.4	7488.9	7095.6	6717.8	6631.2	6537.7	6457.9	6645.1	6943.1	6404.2
37.5°	8298.1	8329.3	7981.0	7537.4	7182.2	7145.8	7090.4	7055.7	7345.1	7757.4	7099.1
40°	9006.8	8975.6	8492.1	8036.5	7752.3	7750.6	7733.2	7774.8	8256.5	8821.4	7991.4
42.5°	9765.7	9673.9	9034.5	8571.9	8377.8	8436.7	8471.4	8641.2	9353.4	10114.0	9079.6
45°	10583.6	10377.4	9597.6	9138.5	9072.7	9197.4	9315.2	9684.3	10644.2	11585.1	10271.7
47.5°	11236.8	11037.5	10179.9	9732.8	9876.6	10065.5	10292.5	10876.4	12089.3	13104.7	11448.3
50°	11751.5	11621.5	10767.3	10425.9	10762.1	11053.2	11424.0	12226.2	13593.4	14584.5	12538.1
52.5°	12250.4	12153.5	11359.9	11136.4	11801.7	12203.7	12707.9	13674.8	15135.5	16040.0	13454.8
55°	12701.0	12631.7	11997.5	12021.7	13025.0	13548.3	14182.5	15324.4	16816.3	17337.8	14231.0
57.5°	13208.6	13120.4	12725.3	13132.4	14596.6	15275.8	16100.6	17178.4	18393.1	18491.8	14821.8
60°	13719.8	13643.6	13532.7	14414.7	16592.8	17306.6	18088.1	18975.2	19992.3	19387.7	14787.3
62.5°	14163.5	14172.1	14367.9	15761.0	18547.2	19373.8	20326.7	21203.5	21439.2	19543.6	13693.8
65°	14915.4	15052.3	15636.3	17667.1	21298.9	22404.4	23574.0	23433.6	21839.5	18086.4	11349.4
67.5°	15809.5	16050.4	17233.9	20207.3	24776.5	26244.1	26696.4	23937.9	20236.7	14702.4	8090.2
70°	15719.5	16050.4	17923.5	22101.2	27642.5	28626.7	27254.3	21664.5	16069.4	9604.6	4297.2
72.5°	13959.0	14432.0	16518.2	21233.0	26739.6	26653.1	23660.5	16150.9	9547.4	3857.0	1679.1
75°	10639.0	11117.2	12912.4	16774.7	21134.3	20406.5	16788.6	8921.9	3623.2	1531.8	1058.8
77.5°	6120.0	6490.8	7877.0	10287.3	13407.9	12661.2	9344.7	3968.0	1764.0	1067.3	826.5
80°	3417.0	3623.2	4465.3	5219.0	6570.5	6023.0	4181.1	2465.7	1316.8	774.6	637.6
82.5°	2701.3	2885.0	3611.0	3292.2	3001.1	2768.9	2401.6	2195.4	1051.8	488.7	381.3
85°	2359.9	2535.0	3056.6	2592.2	2049.8	1880.0	1951.1	2160.8	817.8	294.6	325.7
87.5°	2186.8	2420.6	2723.9	1997.8	1595.9	1413.9	1800.3	2368.6	263.4	183.6	131.7
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°	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0	5174.0
2.5°	5111.6	5083.9	5038.9	4999.0	4936.6	4903.6	4867.3	4841.3	4820.5	4803.2	4830.9
5°	4953.9	4901.9	4806.6	4704.3	4583.1	4487.8	4408.1	4333.6	4281.6	4247.0	4271.2
7.5°	4804.9	4720.0	4571.0	4385.6	4177.6	4000.9	3855.4	3727.1	3638.7	3581.6	3604.1
10°	4720.0	4614.3	4383.9	4092.7	3786.0	3510.6	3281.8	3084.3	2947.4	2869.4	2881.6
12.5°	4699.2	4562.4	4243.5	3843.2	3423.9	3040.9	2718.7	2444.9	2252.5	2152.1	2155.6
15°	4714.8	4539.8	4111.8	3604.1	3073.9	2590.4	2188.5	1855.7	1632.2	1517.9	1516.1
17.5°	4740.8	4522.5	3973.1	3346.0	2718.7	2157.3	1708.5	1382.7	1185.2	1093.3	1086.5
20°	4768.5	4494.7	3817.2	3066.9	2349.6	1755.3	1337.7	1083.0	958.2	908.0	904.5
22.5°	4808.4	4470.5	3656.1	2772.4	1987.5	1429.5	1100.3	928.7	862.9	836.9	833.4
25°	4872.5	4458.3	3484.6	2465.7	1661.7	1195.6	958.2	852.5	814.4	797.1	795.3
27.5°	4979.9	4475.7	3323.4	2167.6	1396.6	1037.9	878.5	814.4	786.6	771.1	769.4
30°	5118.5	4529.4	3153.6	1885.2	1190.4	930.5	830.0	788.4	765.9	750.2	750.2
32.5°	5349.0	4619.4	2975.2	1640.9	1043.1	856.0	793.6	765.9	746.9	734.7	732.9
35°	5688.6	4789.3	2808.8	1438.2	937.4	802.3	762.4	741.6	727.7	720.8	720.8
37.5°	6182.4	5057.9	2661.5	1292.6	873.3	765.9	732.9	717.4	708.7	708.7	708.7
40°	6846.1	5428.7	2541.9	1195.6	836.9	739.9	710.4	698.3	693.0	694.8	694.8
42.5°	7665.7	5910.4	2462.2	1128.0	819.6	724.2	694.8	684.5	679.2	677.5	679.2
45°	8599.6	6457.9	2453.5	1077.8	802.3	713.9	684.5	674.0	663.7	656.7	656.7
47.5°	9507.5	7014.2	2524.6	1060.4	783.2	701.7	675.8	665.3	649.8	634.2	634.2
50°	10309.8	7487.2	2619.9	1067.3	776.3	684.5	662.0	656.7	632.5	615.1	613.4
52.5°	10947.4	7851.0	2697.9	1088.1	783.2	672.3	644.6	646.3	620.3	601.3	599.6
55°	11458.6	8090.2	2677.1	1109.0	798.8	665.3	629.0	632.5	611.6	592.6	592.6
57.5°	11682.1	8001.8	2446.6	1091.6	810.9	667.1	616.8	630.8	613.4	596.1	596.1
60°	11202.1	7216.9	2015.2	1015.4	795.3	662.0	611.6	637.6	635.9	618.6	616.8
62.5°	9750.2	5811.6	1563.0	902.8	741.6	635.9	597.8	635.9	655.0	649.8	648.0
65°	7514.9	4139.5	1193.9	781.4	668.8	592.6	561.4	596.1	622.1	629.0	627.3
67.5°	4877.6	2536.7	920.0	667.1	587.4	542.4	514.6	530.2	535.4	535.4	531.9
70°	2398.1	1365.4	732.9	561.4	504.2	488.7	473.0	464.4	455.7	448.8	448.8
72.5°	1183.5	892.3	603.0	474.8	435.0	428.0	424.5	414.1	407.2	398.5	395.1
75°	875.0	726.0	512.9	400.3	374.3	367.3	374.3	365.6	363.9	356.9	353.4
77.5°	719.1	618.6	441.8	343.1	320.6	308.4	318.9	320.6	322.3	311.9	308.4
80°	583.9	523.2	369.1	284.2	263.4	254.7	261.7	275.5	279.0	263.4	256.5
82.5°	421.0	428.0	298.0	221.8	204.5	197.5	211.4	228.7	232.2	209.7	204.5
85°	353.4	356.9	228.7	157.6	140.3	129.9	152.5	169.8	182.0	159.4	154.3
87.5°	147.3	209.7	131.7	88.4	77.9	67.6	81.4	90.1	109.1	100.5	98.8
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)