

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: P190852

Luminaire Tested: **GLEON-AF-04-LED-E1-5NQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-5NQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25336.5 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 225
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: 25 FT

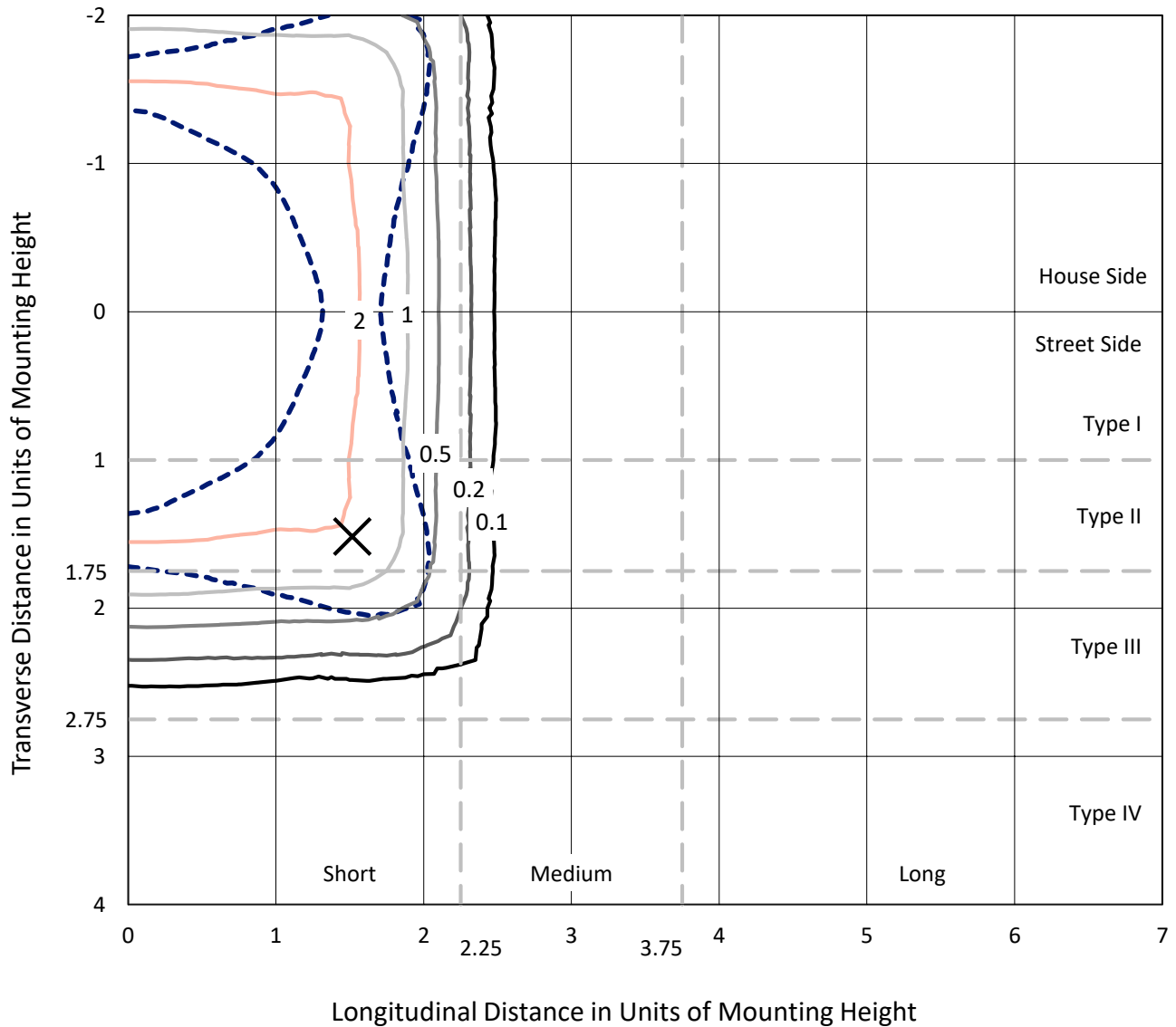


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

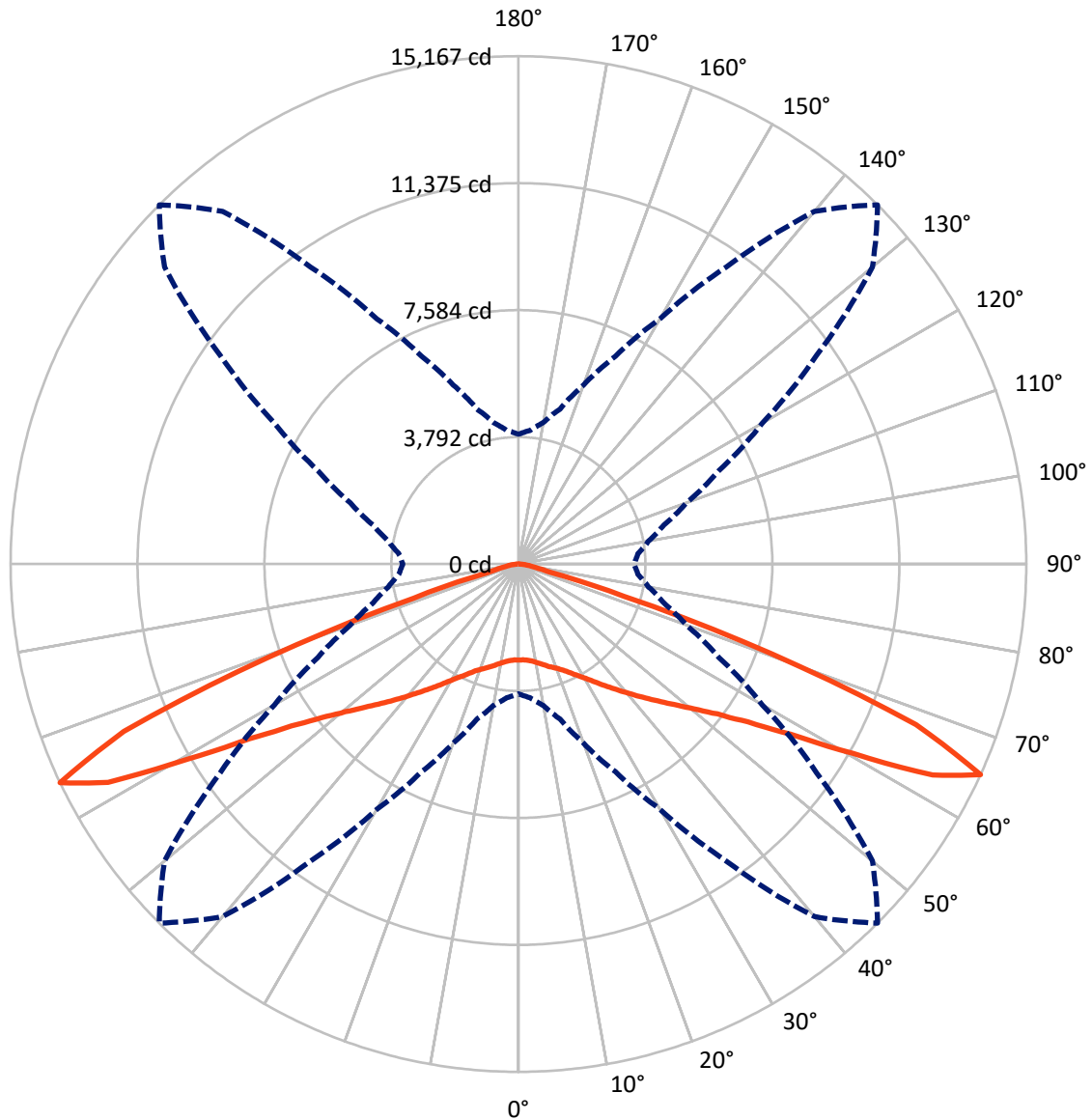


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12668.2	0.0	12668.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12668.2	0.0	12668.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	25336.5	0.0	25336.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.4	1.1
10°-20°	896.2	3.5
20°-30°	1675.7	6.6
30°-40°	2834.0	11.2
40°-50°	4633.9	18.3
50°-60°	7368.6	29.1
60°-70°	6660.7	26.3
70°-80°	843.0	3.3
80°-90°	145.0	0.6
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°	25336.5	100.0
0°-180°	25336.5	100.0



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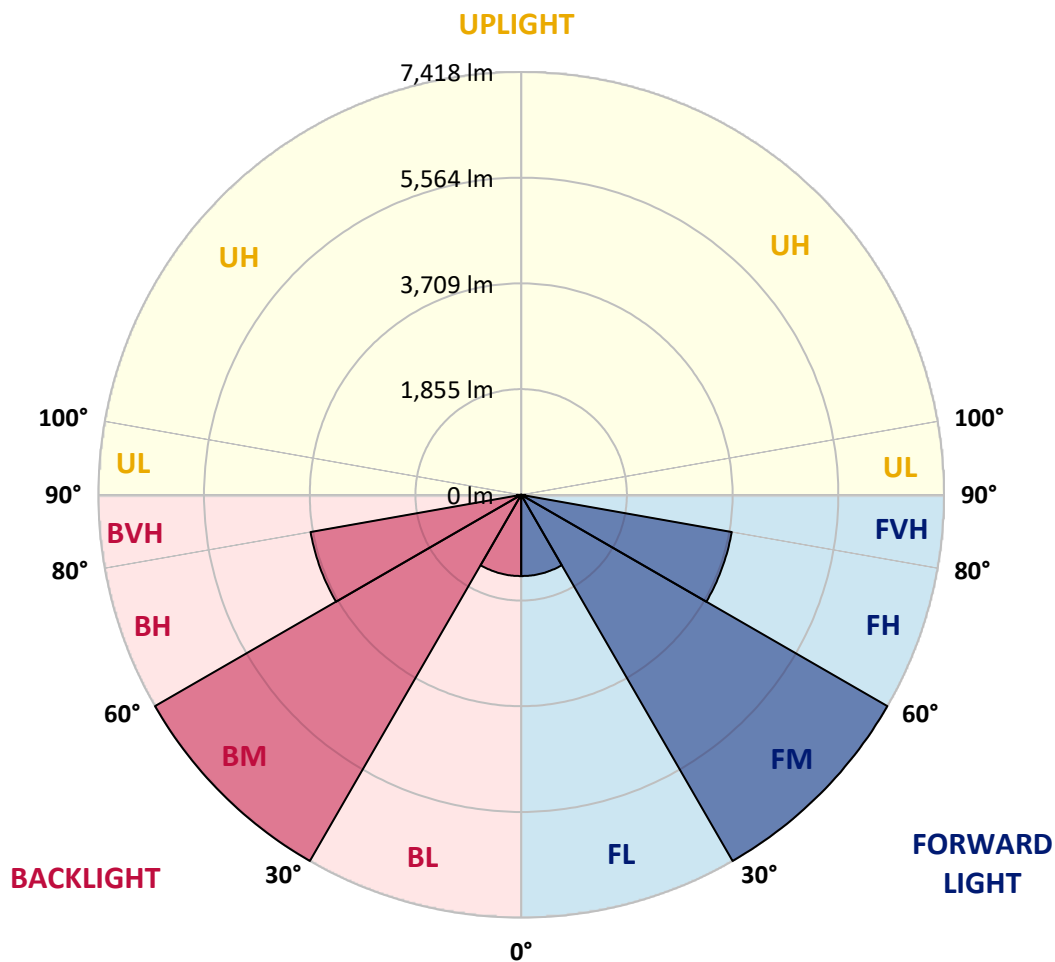
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1425.6	5.6			
FM	(30°-60°)	7418.3	29.3			
FH	(60°-80°)	3751.8	14.8			G2/5000
FVH	(80°-90°)	72.5	0.3			G1/100
BL	(0°-30°)	1425.6	5.6	B3/2500		
BM	(30°-60°)	7418.3	29.3	B4/8500		
BH	(60°-80°)	3751.8	14.8	B4/5000		G2/5000
BVH	(80°-90°)	72.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2869.2	2871.6	2874.0	2871.6	2874.0	2870.4	2868.0	2871.6	2868.0	2864.5	2866.8
5°	2894.1	2895.4	2895.4	2891.8	2895.4	2892.9	2889.4	2894.1	2890.6	2887.0	2889.4
7.5°	2935.7	2940.4	2936.9	2933.3	2935.7	2933.3	2931.0	2932.1	2931.0	2927.4	2928.5
10°	2991.4	2995.0	2992.6	2991.4	2993.8	2992.6	2990.3	2989.1	2990.3	2986.7	2986.7
12.5°	3059.0	3057.9	3056.7	3057.9	3061.4	3061.4	3060.3	3061.4	3063.8	3065.0	3062.6
15°	3125.5	3127.9	3127.9	3127.9	3135.0	3141.0	3144.4	3146.9	3151.6	3152.8	3148.0
17.5°	3208.6	3208.6	3207.4	3208.6	3215.6	3225.2	3228.7	3233.4	3238.3	3241.8	3235.9
20°	3301.2	3303.5	3303.5	3305.9	3315.4	3326.0	3326.0	3328.4	3326.0	3328.4	3324.9
22.5°	3413.9	3421.0	3421.0	3422.2	3431.7	3444.7	3441.1	3444.7	3438.8	3443.6	3438.8
25°	3561.0	3571.6	3569.3	3569.3	3576.4	3584.7	3586.0	3593.0	3591.9	3597.8	3594.2
27.5°	3727.1	3743.7	3748.5	3747.3	3752.1	3760.4	3762.7	3771.0	3766.3	3771.0	3768.7
30°	3926.5	3933.6	3943.1	3946.6	3952.6	3960.9	3960.9	3962.1	3956.2	3963.2	3966.8
32.5°	4132.9	4146.0	4155.5	4176.8	4187.6	4193.5	4192.3	4194.6	4188.7	4198.2	4205.4
35°	4405.8	4415.4	4430.8	4447.4	4461.6	4460.5	4456.9	4458.0	4458.0	4466.4	4473.5
37.5°	4734.5	4736.9	4757.1	4780.9	4787.9	4780.9	4759.5	4754.7	4744.0	4754.7	4766.5
40°	5082.2	5090.5	5130.9	5146.3	5149.8	5136.8	5106.0	5088.2	5064.4	5077.5	5094.1
42.5°	5446.5	5463.1	5499.9	5527.2	5539.1	5530.8	5488.0	5460.7	5429.9	5437.0	5453.7
45°	5849.9	5870.1	5922.4	5948.5	5971.0	5958.0	5916.4	5874.9	5826.2	5829.8	5855.9
47.5°	6300.9	6321.0	6388.6	6432.6	6444.5	6442.0	6395.8	6338.8	6272.4	6270.0	6292.6
50°	6806.3	6826.6	6910.7	6978.4	7012.8	7009.3	6954.6	6874.0	6793.3	6794.4	6823.0
52.5°	7300.0	7324.9	7412.7	7529.0	7596.6	7645.3	7612.1	7536.1	7437.7	7440.0	7466.1
55°	7762.8	7804.3	7905.2	8063.0	8188.7	8325.2	8364.4	8362.0	8302.7	8319.2	8345.3
57.5°	7987.0	8048.7	8204.2	8453.4	8709.7	8987.3	9222.3	9397.8	9472.6	9585.4	9559.3
60°	7562.3	7660.7	7889.7	8256.3	8763.1	9342.1	9962.7	10569.0	11086.4	11476.8	11252.6
62.5°	6191.7	6319.9	6597.5	7067.4	7834.0	8760.7	9948.5	11381.9	12943.5	13885.6	13212.8
65°	3874.2	4007.2	4289.5	4792.7	5689.8	6841.9	8453.4	10829.0	13746.8	15167.2	13797.9
67.5°	1510.6	1582.9	1736.0	2057.6	2731.6	3756.8	5374.2	8070.1	11559.9	12804.6	11345.1
70°	757.1	764.1	792.7	852.0	996.8	1294.5	1969.8	3741.3	6629.5	8007.1	6391.1
72.5°	547.1	548.2	562.4	588.6	634.8	701.2	829.4	1145.1	2156.1	3295.2	2020.7
75°	418.9	423.6	431.9	446.2	471.1	504.3	550.6	659.7	817.5	948.1	797.4
77.5°	322.7	332.3	338.2	351.3	366.6	389.2	402.2	443.8	516.2	543.5	535.2
80°	245.6	253.9	267.0	277.6	288.4	299.0	294.3	313.2	351.3	373.8	361.9
82.5°	156.6	166.1	204.1	213.6	218.3	225.5	217.2	218.3	235.0	249.2	235.0
85°	100.9	106.8	129.3	141.2	142.4	147.1	143.6	135.2	135.2	123.4	138.8
87.5°	46.2	47.5	58.1	68.8	71.2	64.0	62.9	60.6	48.7	46.2	49.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2865.7	2868.0	2869.2	2872.8	2874.0	2874.0	2875.1	2877.6
5°	2888.2	2891.8	2892.9	2897.7	2898.8	2897.7	2900.1	2901.3
7.5°	2928.5	2934.4	2936.9	2941.6	2938.0	2942.8	2944.0	2944.0
10°	2987.8	2993.8	2995.0	2999.7	2997.3	2999.7	2999.7	2997.3
12.5°	3066.2	3067.3	3063.8	3067.3	3062.6	3065.0	3061.4	3059.0
15°	3152.8	3149.3	3141.0	3141.0	3133.8	3135.0	3133.8	3132.6
17.5°	3237.0	3230.0	3224.0	3221.6	3215.6	3214.5	3210.9	3210.9
20°	3329.6	3326.0	3322.4	3317.7	3311.8	3305.9	3304.6	3307.1
22.5°	3441.1	3440.0	3440.0	3437.6	3429.2	3423.3	3419.8	3419.8
25°	3590.7	3580.0	3580.0	3578.8	3575.2	3571.6	3564.6	3568.2
27.5°	3759.1	3753.2	3758.0	3756.8	3753.2	3753.2	3748.5	3748.5
30°	3966.8	3964.4	3971.6	3965.7	3953.8	3952.6	3947.9	3941.9
32.5°	4206.5	4204.1	4214.9	4207.7	4188.7	4178.0	4168.5	4163.8
35°	4473.5	4474.7	4487.7	4483.0	4461.6	4454.5	4437.9	4435.5
37.5°	4765.4	4784.3	4806.9	4811.7	4793.9	4789.1	4771.3	4761.8
40°	5108.3	5133.3	5167.6	5175.9	5157.0	5153.4	5128.5	5115.5
42.5°	5473.8	5516.5	5559.2	5566.4	5547.4	5528.3	5504.6	5495.2
45°	5882.0	5933.0	5988.8	6003.0	5974.5	5952.0	5921.1	5921.1
47.5°	6340.0	6404.1	6467.0	6506.2	6480.1	6456.4	6419.5	6395.8
50°	6881.1	6969.0	7050.8	7091.1	7049.6	7004.6	6940.4	6919.0
52.5°	7559.8	7654.7	7725.9	7704.7	7640.5	7577.6	7507.6	7479.2
55°	8426.0	8458.1	8458.1	8377.5	8249.3	8143.6	8033.3	7996.5
57.5°	9509.5	9386.0	9196.1	8955.3	8652.7	8389.3	8211.3	8127.0
60°	10782.6	10189.4	9519.0	8860.4	8319.2	7873.1	7608.5	7487.5
62.5°	11631.1	10079.0	8735.8	7678.5	6900.1	6362.5	5997.0	5854.7
65°	10870.5	8405.9	6607.0	5342.1	4493.6	3946.6	3584.7	3451.8
67.5°	7962.1	5267.4	3518.2	2521.6	1847.6	1473.8	1325.4	1263.8
70°	3574.1	1854.6	1136.8	887.6	765.4	702.5	675.1	665.6
72.5°	1077.5	779.6	657.3	593.3	544.6	513.8	491.2	488.9
75°	650.3	541.1	480.6	442.6	411.7	386.9	375.0	371.4
77.5°	454.5	397.5	369.1	341.8	318.0	299.0	288.4	280.1
80°	319.2	292.0	278.9	263.4	248.0	230.2	214.8	207.7
82.5°	213.6	207.7	207.7	198.1	185.2	168.5	137.7	130.5
85°	137.7	136.5	138.8	135.2	125.8	108.0	89.0	84.3
87.5°	64.0	65.3	72.4	71.2	68.8	57.0	45.1	42.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)