

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: P299865

Luminaire Tested: **GLNA-AF-09-LED-E1-5WQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299865
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-5WQ-8030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45582 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G5

Input Watts (W): 501
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



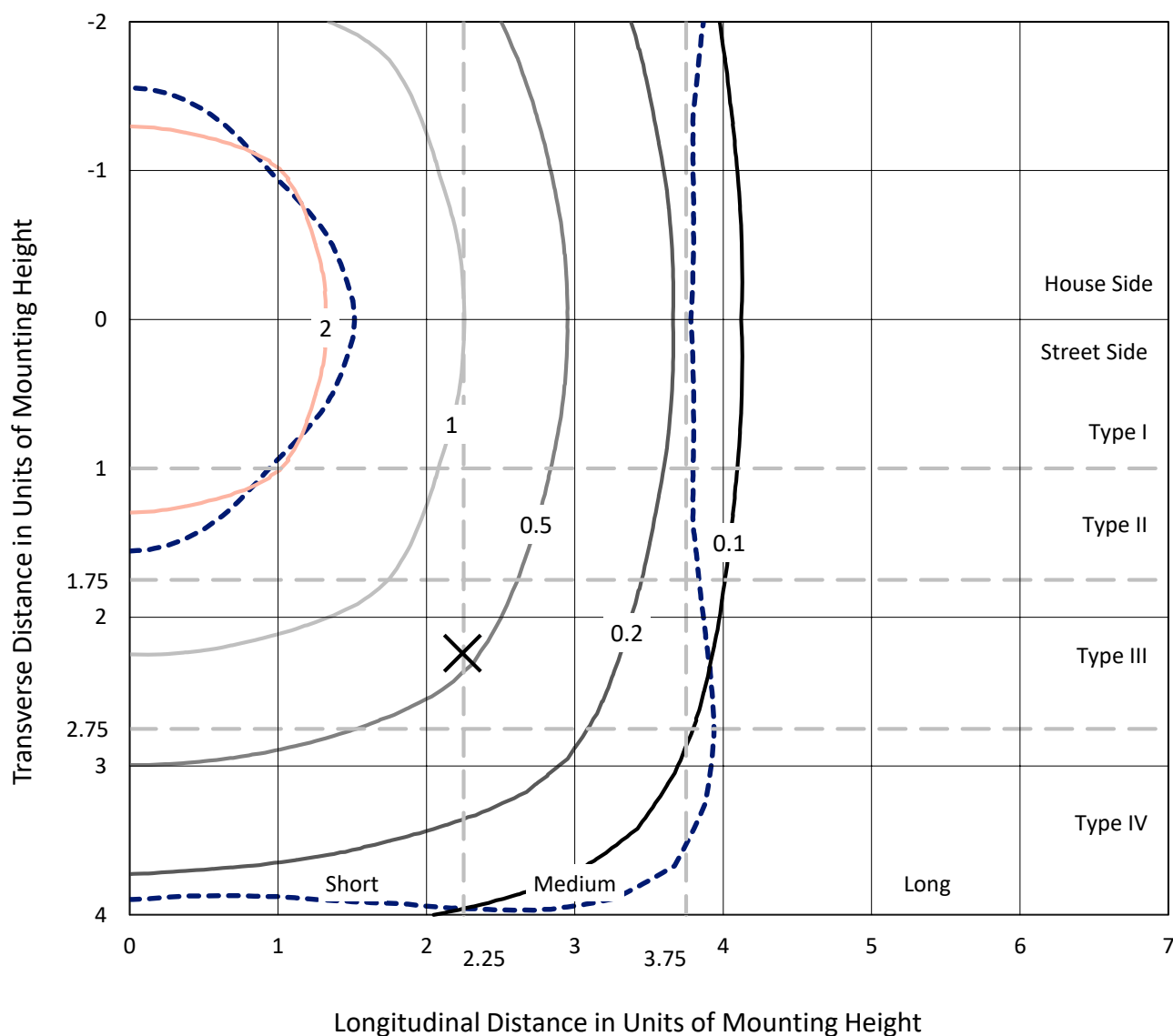
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

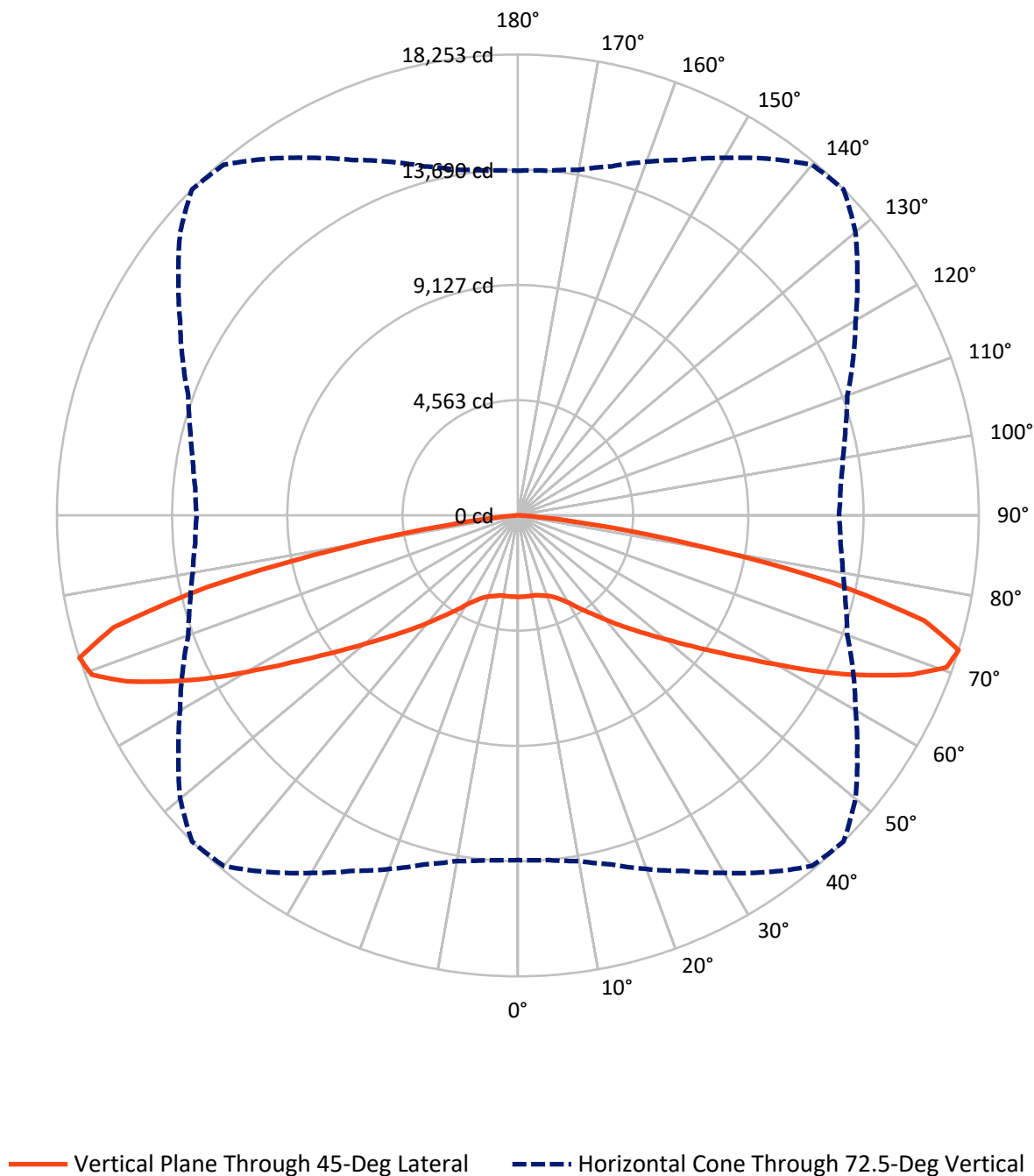


Based on 30 foot mounting height. Maximum calculated value = 3.6 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	22791.0	0.0	22791.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	22791.0	0.0	22791.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	45582.0	0.0	45582.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.2	0.7
10°-20°	936.1	2.1
20°-30°	1710.7	3.8
30°-40°	2949.5	6.5
40°-50°	5042.2	11.1
50°-60°	8172.7	17.9
60°-70°	13558.2	29.7
70°-80°	11941.6	26.2
80°-90°	962.8	2.1
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°	45582.0	100.0
0°-180°	45582.0	100.0

Coefficient of Utilization



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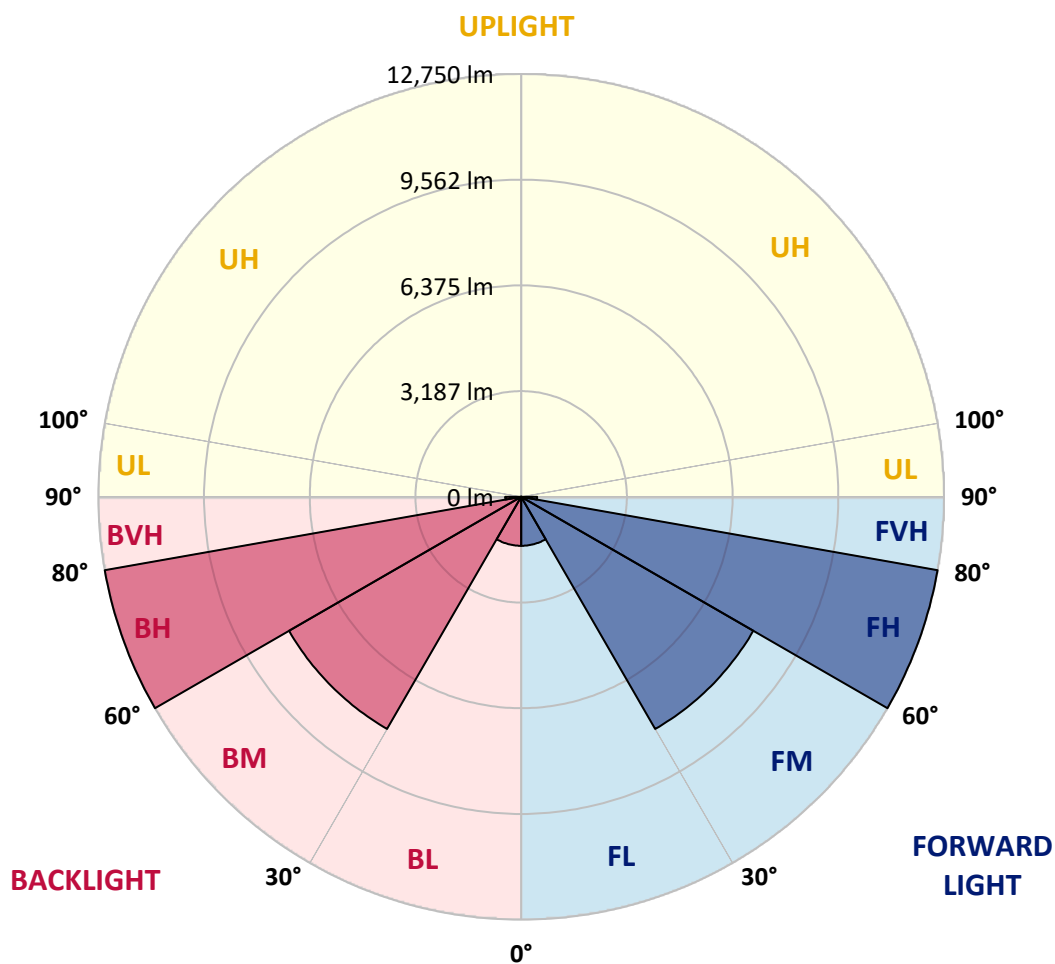
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1477.5	3.2			
FM	(30°-60°)	8082.2	17.7			
FH	(60°-80°)	12749.9	28.0			G5
FVH	(80°-90°)	481.4	1.1			G3/500
BL	(0°-30°)	1477.5	3.2	B3/2500		
BM	(30°-60°)	8082.2	17.7	B4/8500		
BH	(60°-80°)	12749.9	28.0	B5		G5
BVH	(80°-90°)	481.4	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9
2.5°	3227.9	3230.0	3232.1	3230.0	3230.0	3227.9	3225.8	3227.9	3225.8	3221.6	3223.7
5°	3238.4	3242.5	3242.5	3238.4	3240.5	3238.4	3234.2	3236.3	3232.1	3225.8	3225.8
7.5°	3250.9	3253.0	3253.0	3248.8	3250.9	3246.7	3242.5	3240.5	3236.3	3227.9	3221.6
10°	3269.7	3271.8	3269.7	3265.5	3265.5	3259.3	3248.8	3244.6	3236.3	3223.7	3217.5
12.5°	3290.6	3292.7	3290.6	3286.5	3284.4	3273.9	3265.5	3259.3	3253.0	3242.5	3232.1
15°	3319.9	3324.1	3319.9	3311.5	3305.3	3296.9	3292.7	3294.8	3296.9	3288.5	3278.1
17.5°	3374.3	3376.3	3370.1	3351.3	3342.9	3334.5	3334.5	3338.7	3345.0	3340.8	3330.4
20°	3474.6	3468.3	3453.7	3430.7	3420.3	3405.6	3403.5	3405.6	3405.6	3403.5	3395.2
22.5°	3600.0	3595.9	3577.0	3547.8	3533.1	3524.8	3512.2	3501.8	3499.7	3493.4	3485.1
25°	3750.6	3748.5	3725.5	3700.4	3689.9	3679.5	3669.0	3654.4	3641.9	3627.2	3618.9
27.5°	3942.9	3934.5	3901.1	3888.6	3873.9	3867.6	3853.0	3836.3	3825.8	3807.0	3796.6
30°	4154.1	4154.1	4126.9	4122.7	4122.7	4108.1	4091.3	4062.1	4043.3	4024.4	4018.2
32.5°	4365.2	4367.3	4340.1	4348.5	4354.8	4365.2	4369.4	4358.9	4346.4	4344.3	4331.8
35°	4670.4	4662.1	4634.9	4641.2	4639.1	4637.0	4637.0	4660.0	4664.2	4668.4	4643.3
37.5°	5048.8	5048.8	5021.7	5021.7	5009.1	4996.6	4979.9	4994.5	5017.5	5023.8	5007.0
40°	5481.6	5496.2	5462.8	5460.7	5464.9	5425.2	5406.3	5429.3	5444.0	5469.1	5450.2
42.5°	5991.7	5981.3	5947.8	5943.6	5920.6	5908.1	5891.4	5910.2	5933.2	5949.9	5956.2
45°	6480.9	6472.6	6434.9	6434.9	6411.9	6401.5	6409.8	6441.2	6451.6	6474.6	6497.6
47.5°	6963.9	6953.4	6928.3	6938.8	6940.9	6959.7	6986.8	7016.1	7045.4	7076.7	7087.2
50°	7457.2	7459.3	7432.1	7457.2	7488.6	7540.9	7614.0	7662.1	7722.7	7762.5	7775.0
52.5°	7906.7	7915.1	7944.4	8002.9	8065.6	8168.0	8293.5	8410.6	8510.9	8577.8	8573.6
55°	8446.1	8458.6	8529.7	8630.1	8732.5	8887.2	9073.3	9280.3	9447.5	9543.7	9483.0
57.5°	9136.0	9163.2	9242.6	9378.5	9531.1	9731.8	9986.9	10298.4	10557.6	10687.2	10589.0
60°	10083.1	10099.8	10195.9	10346.5	10530.4	10779.2	11120.0	11538.1	11904.0	12075.4	11962.5
62.5°	11331.2	11362.5	11439.9	11592.5	11780.6	12062.9	12478.9	13001.6	13457.3	13695.6	13440.6
65°	12821.8	12922.1	12986.9	13141.6	13317.2	13616.2	14051.0	14611.3	15100.5	15257.3	14962.6
67.5°	14297.7	14385.5	14498.4	14676.1	14853.8	15190.4	15593.9	16137.5	16674.8	16816.9	16359.1
70°	14943.7	14993.9	15169.5	15412.0	15752.8	16150.0	16616.2	17226.7	17891.5	18008.6	17427.4
72.5°	13649.6	13699.8	13896.3	14308.2	14901.9	15533.3	16346.5	17243.4	18121.5	18253.2	17452.5
75°	10323.5	10241.9	10532.5	11078.2	11878.9	12759.0	13896.3	15182.1	16451.1	16616.2	15660.8
77.5°	5335.3	5324.8	5544.3	6221.7	7177.1	8178.5	9430.8	10883.8	12125.6	12627.3	11849.6
80°	1503.2	1519.9	1624.4	1961.0	2519.2	3242.5	4221.0	5582.0	6598.0	7116.5	6681.6
82.5°	589.6	635.5	675.3	738.0	811.2	917.8	1225.1	1823.0	2446.0	2922.7	2393.8
85°	211.2	225.8	319.9	378.4	384.7	405.6	462.0	539.4	650.2	775.6	637.6
87.5°	79.4	87.8	102.4	169.3	167.2	152.6	186.1	194.4	146.3	133.8	165.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9	3227.9
2.5°	3219.6	3221.6	3221.6	3223.7	3225.8	3225.8	3230.0	3230.0
5°	3221.6	3221.6	3217.5	3219.6	3217.5	3217.5	3219.6	3219.6
7.5°	3217.5	3215.4	3211.2	3209.1	3204.9	3204.9	3204.9	3204.9
10°	3211.2	3209.1	3204.9	3202.8	3200.7	3200.7	3200.7	3200.7
12.5°	3227.9	3221.6	3217.5	3215.4	3215.4	3215.4	3215.4	3215.4
15°	3271.8	3257.2	3246.7	3246.7	3248.8	3253.0	3253.0	3257.2
17.5°	3326.2	3309.4	3299.0	3290.6	3294.8	3301.1	3305.3	3309.4
20°	3391.0	3382.6	3368.0	3359.6	3359.6	3368.0	3372.2	3374.3
22.5°	3480.9	3474.6	3468.3	3457.9	3457.9	3462.1	3470.4	3470.4
25°	3614.7	3610.5	3606.3	3598.0	3595.9	3595.9	3600.0	3604.2
27.5°	3781.9	3784.0	3779.8	3777.7	3771.5	3769.4	3775.7	3773.6
30°	4005.6	4016.1	4026.5	4018.2	4007.7	4001.4	3995.2	3986.8
32.5°	4308.8	4296.2	4287.9	4273.2	4254.4	4237.7	4225.1	4210.5
35°	4595.2	4574.3	4565.9	4578.5	4576.4	4565.9	4551.3	4538.7
37.5°	4946.4	4942.2	4946.4	4969.4	4965.2	4975.7	4946.4	4944.3
40°	5389.6	5393.8	5423.1	5450.2	5464.9	5479.5	5462.8	5446.1
42.5°	5903.9	5901.8	5912.3	5949.9	5975.0	5991.7	5956.2	5952.0
45°	6447.5	6432.8	6441.2	6472.6	6497.6	6516.5	6476.7	6476.7
47.5°	7045.4	7020.3	6993.1	7028.7	7043.3	7055.8	7024.5	7014.0
50°	7712.3	7660.0	7601.5	7616.1	7616.1	7611.9	7572.2	7570.1
52.5°	8477.5	8381.3	8274.7	8234.9	8211.9	8186.9	8117.9	8084.4
55°	9357.6	9213.4	9046.1	8943.7	8889.3	8820.3	8705.3	8674.0
57.5°	10386.2	10160.4	9871.9	9746.5	9625.2	9512.3	9384.8	9349.2
60°	11605.0	11272.6	10890.0	10658.0	10526.3	10417.6	10285.8	10279.6
62.5°	12963.9	12439.2	12006.4	11797.4	11701.2	11605.0	11479.6	11496.3
65°	14345.8	13798.1	13392.5	13223.2	13133.3	13053.8	12928.4	12947.2
67.5°	15708.9	15205.1	14759.8	14586.2	14485.9	14385.5	14272.7	14291.5
70°	16687.3	16062.2	15560.5	15175.8	14935.4	14663.6	14488.0	14444.1
72.5°	16407.2	15443.4	14646.9	13883.8	13436.4	13072.6	12825.9	12719.3
75°	14199.5	12882.4	11858.0	10921.4	10394.6	9966.0	9654.5	9460.0
77.5°	10545.1	9064.9	7854.5	6775.7	5922.7	5349.9	4946.4	4685.1
80°	5772.2	4390.3	3209.1	2255.8	1657.9	1377.7	1216.7	1139.4
82.5°	1797.9	1160.3	855.1	738.0	685.7	656.5	608.4	531.0
85°	572.8	501.7	466.2	445.3	424.4	370.0	255.1	232.1
87.5°	221.6	227.9	225.8	213.2	217.4	156.8	125.4	110.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)