

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: P299488

Luminaire Tested: **GLNA-AF-06-LED-E1-5NQ-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299488
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: GLNA-AF-06-LED-E1-5NQ-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24109.2 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

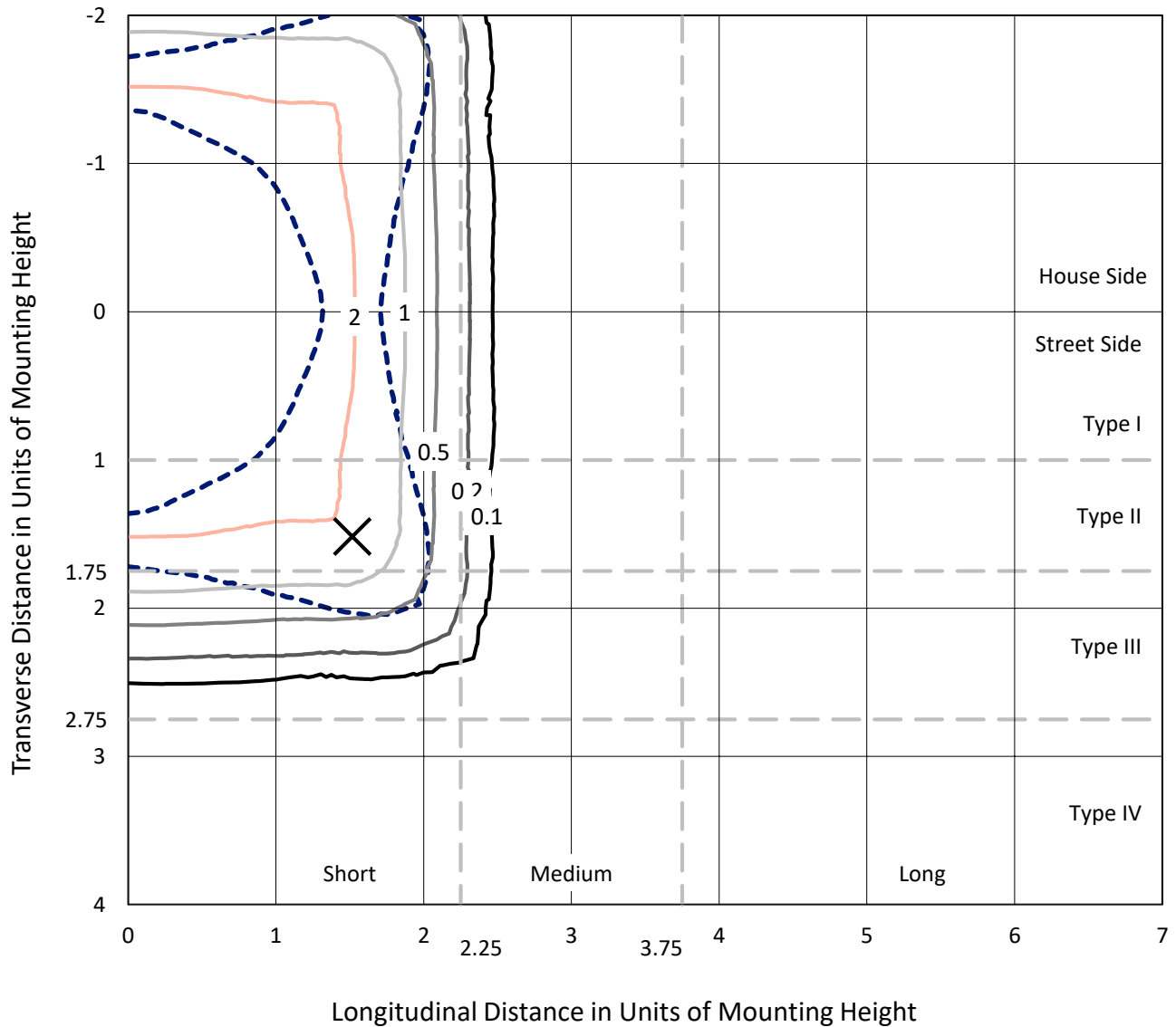
Input Watts (W): 193
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

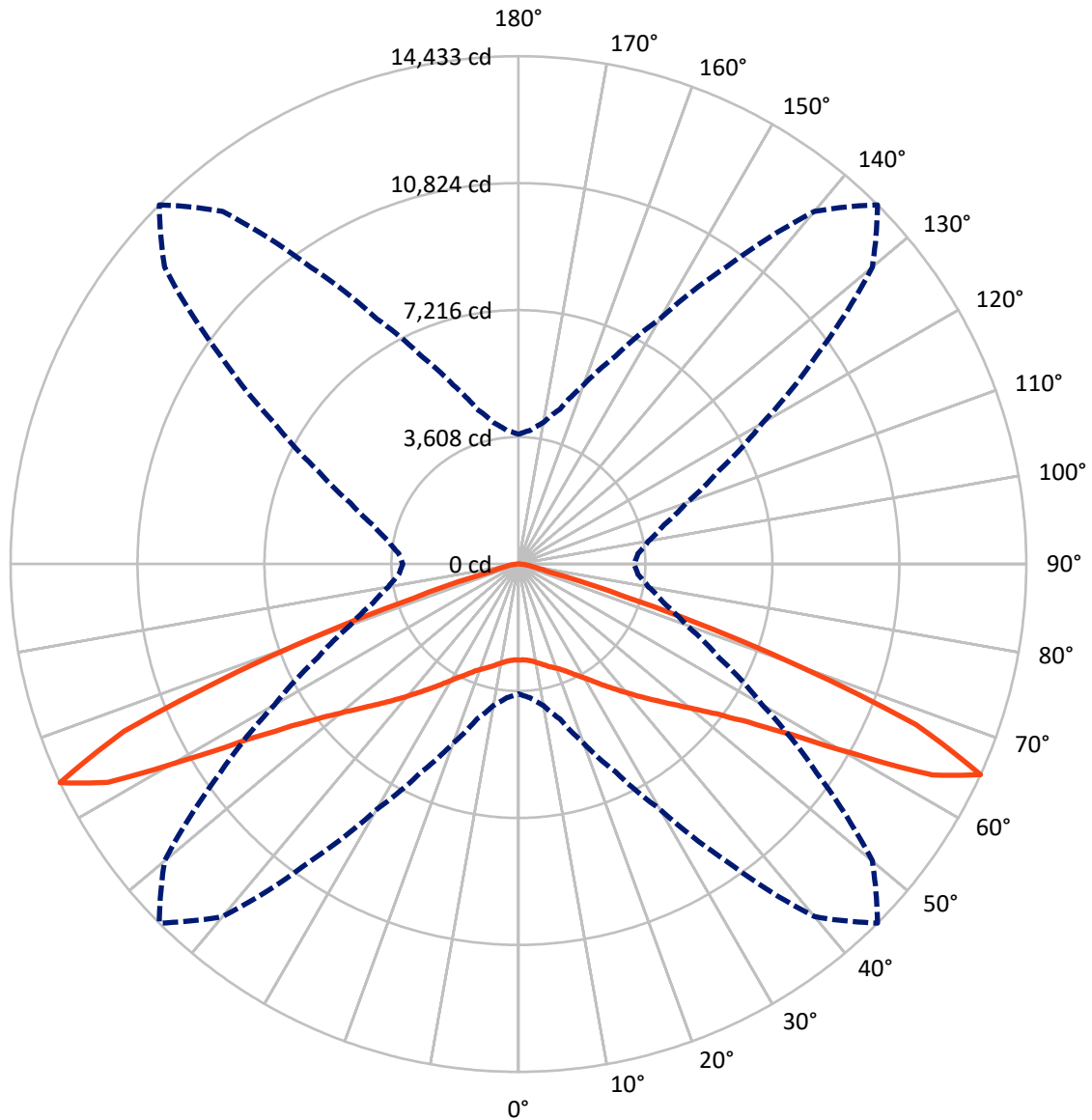
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 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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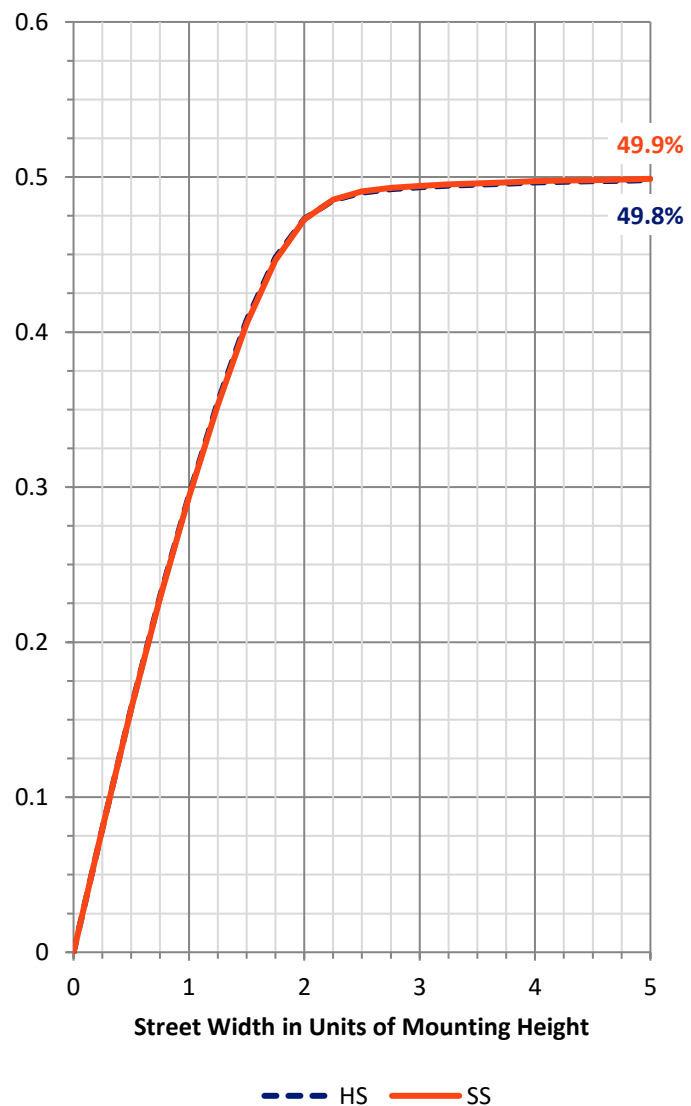
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12054.6	0.0	12054.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12054.6	0.0	12054.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	24109.2	0.0	24109.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.9	1.1
10°-20°	852.8	3.5
20°-30°	1594.5	6.6
30°-40°	2696.7	11.2
40°-50°	4409.4	18.3
50°-60°	7011.7	29.1
60°-70°	6338.1	26.3
70°-80°	802.1	3.3
80°-90°	138.0	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°	24109.2	100.0
0°-180°	24109.2	100.0

Coefficient of Utilization



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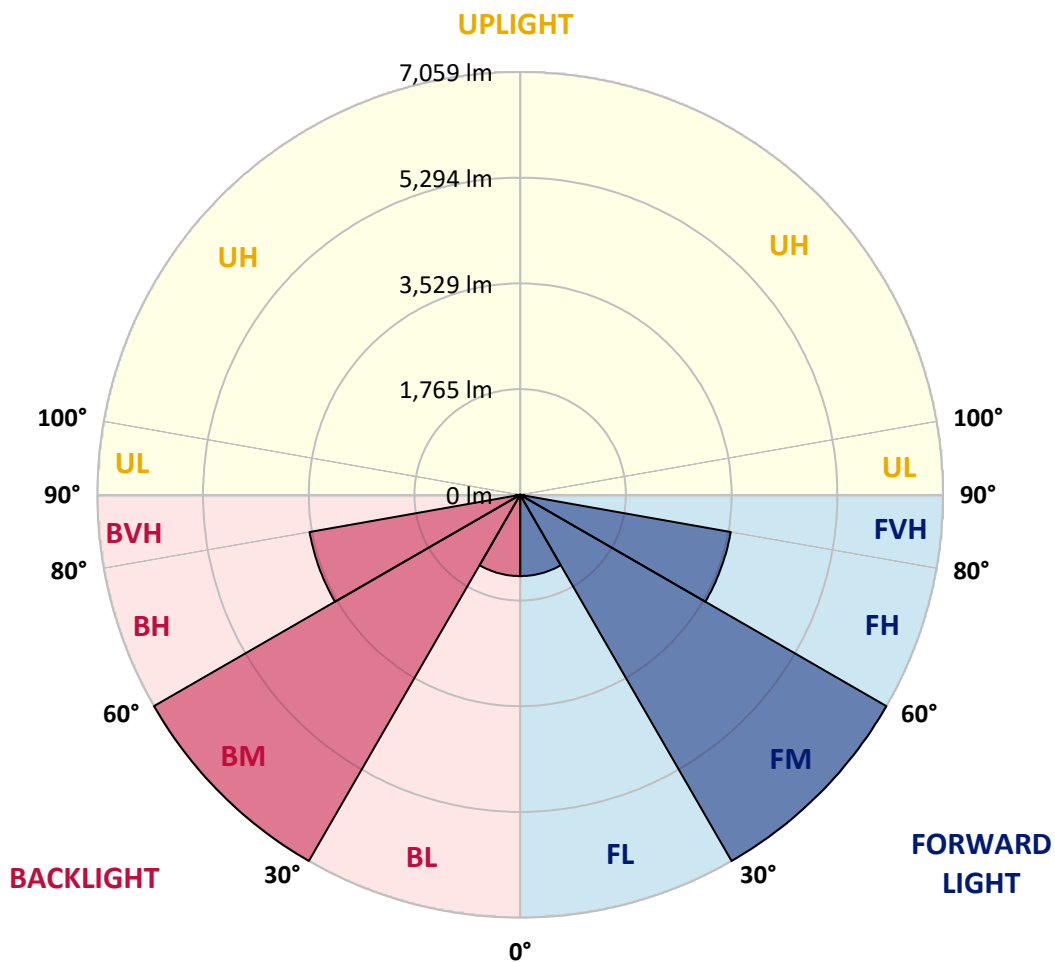
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1356.6	5.6			
FM	(30°-60°)	7058.9	29.3			
FH	(60°-80°)	3570.1	14.8			G2/5000
FVH	(80°-90°)	69.0	0.3			G1/100
BL	(0°-30°)	1356.6	5.6	B3/2500		
BM	(30°-60°)	7058.9	29.3	B4/8500		
BH	(60°-80°)	3570.1	14.8	B4/5000		G2/5000
BVH	(80°-90°)	69.0	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°	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0
2.5°	2730.2	2732.5	2734.7	2732.5	2734.7	2731.4	2729.1	2732.5	2729.1	2725.7	2728.0
5°	2753.9	2755.1	2755.1	2751.7	2755.1	2752.8	2749.4	2753.9	2750.5	2747.2	2749.4
7.5°	2793.5	2798.0	2794.6	2791.2	2793.5	2791.2	2788.9	2790.1	2788.9	2785.5	2786.7
10°	2846.5	2849.9	2847.7	2846.5	2848.8	2847.7	2845.4	2844.3	2845.4	2842.0	2842.0
12.5°	2910.9	2909.8	2908.6	2909.8	2913.1	2913.1	2912.0	2913.1	2915.4	2916.5	2914.3
15°	2974.1	2976.4	2976.4	2976.4	2983.1	2988.8	2992.2	2994.4	2999.0	3000.1	2995.6
17.5°	3053.2	3053.2	3052.0	3053.2	3059.9	3069.0	3072.3	3076.9	3081.4	3084.8	3079.1
20°	3141.2	3143.5	3143.5	3145.7	3154.8	3164.9	3164.9	3167.2	3164.9	3167.2	3163.8
22.5°	3248.5	3255.3	3255.3	3256.4	3265.4	3277.8	3274.5	3277.8	3272.2	3276.7	3272.2
25°	3388.5	3398.7	3396.4	3396.4	3403.2	3411.1	3412.2	3419.0	3417.9	3423.5	3420.1
27.5°	3546.6	3562.4	3566.9	3565.8	3570.3	3578.2	3580.5	3588.4	3583.8	3588.4	3586.1
30°	3736.3	3743.0	3752.1	3755.5	3761.1	3769.0	3769.0	3770.1	3764.5	3771.3	3774.7
32.5°	3932.7	3945.2	3954.2	3974.5	3984.7	3990.3	3989.2	3991.5	3985.8	3994.8	4001.6
35°	4192.4	4201.5	4216.1	4232.0	4245.5	4244.4	4241.0	4242.1	4242.1	4250.0	4256.8
37.5°	4505.2	4507.5	4526.7	4549.2	4556.0	4549.2	4528.9	4524.4	4514.2	4524.4	4535.7
40°	4836.0	4843.9	4882.3	4897.0	4900.4	4888.0	4858.6	4841.7	4819.1	4831.5	4847.3
42.5°	5182.7	5198.5	5233.5	5259.5	5270.7	5262.8	5222.2	5196.2	5166.9	5173.6	5189.5
45°	5566.6	5585.8	5635.5	5660.3	5681.8	5669.3	5629.8	5590.3	5544.0	5547.4	5572.2
47.5°	5995.6	6014.8	6079.2	6121.0	6132.3	6130.0	6086.0	6031.8	5968.5	5966.3	5987.7
50°	6476.7	6495.8	6576.0	6640.4	6673.1	6669.7	6617.8	6541.0	6464.2	6465.4	6492.5
52.5°	6946.4	6970.1	7053.6	7164.3	7228.7	7274.9	7243.3	7171.1	7077.3	7079.6	7104.4
55°	7386.7	7426.2	7522.2	7672.4	7792.1	7921.9	7959.2	7956.9	7900.5	7916.3	7941.1
57.5°	7600.1	7658.8	7806.8	8043.9	8287.8	8552.0	8775.6	8942.7	9013.8	9121.1	9096.2
60°	7195.9	7289.6	7507.5	7856.4	8338.6	8889.6	9480.1	10057.1	10549.4	10920.9	10707.5
62.5°	5891.8	6013.7	6277.9	6725.1	7454.5	8336.3	9466.6	10830.6	12316.5	13213.0	12572.8
65°	3686.6	3813.1	4081.8	4560.5	5414.1	6510.5	8043.9	10304.4	13080.9	14432.5	13129.5
67.5°	1437.4	1506.3	1651.9	1957.9	2599.2	3574.8	5113.8	7679.2	10999.9	12184.4	10795.6
70°	720.4	727.2	754.3	810.7	948.5	1231.9	1874.3	3560.1	6308.4	7619.3	6081.5
72.5°	520.5	521.7	535.2	560.0	604.1	667.3	789.3	1089.6	2051.6	3135.6	1922.9
75°	398.6	403.1	411.0	424.6	448.3	479.9	523.9	627.8	778.0	902.2	758.8
77.5°	307.1	316.2	321.8	334.2	348.9	370.4	382.8	422.3	491.2	517.1	509.2
80°	233.7	241.6	254.1	264.2	274.4	284.5	280.0	298.1	334.2	355.7	344.4
82.5°	149.0	158.1	194.2	203.2	207.8	214.5	206.6	207.8	223.6	237.1	223.6
85°	96.0	101.6	123.1	134.4	135.5	140.0	136.6	128.7	128.7	117.4	132.1
87.5°	44.0	45.2	55.3	65.5	67.7	61.0	59.8	57.6	46.3	44.0	47.4
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°	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0	2728.0
2.5°	2726.8	2729.1	2730.2	2733.6	2734.7	2734.7	2735.9	2738.1
5°	2748.3	2751.7	2752.8	2757.3	2758.4	2757.3	2759.6	2760.7
7.5°	2786.7	2792.3	2794.6	2799.1	2795.7	2800.2	2801.4	2801.4
10°	2843.1	2848.8	2849.9	2854.4	2852.2	2854.4	2854.4	2852.2
12.5°	2917.7	2918.8	2915.4	2918.8	2914.3	2916.5	2913.1	2910.9
15°	3000.1	2996.7	2988.8	2988.8	2982.0	2983.1	2982.0	2980.9
17.5°	3080.2	3073.5	3067.8	3065.6	3059.9	3058.8	3055.4	3055.4
20°	3168.3	3164.9	3161.5	3157.0	3151.4	3145.7	3144.6	3146.9
22.5°	3274.5	3273.3	3273.3	3271.1	3263.2	3257.5	3254.1	3254.1
25°	3416.7	3406.6	3406.6	3405.4	3402.0	3398.7	3391.9	3395.3
27.5°	3577.1	3571.4	3575.9	3574.8	3571.4	3571.4	3566.9	3566.9
30°	3774.7	3772.4	3779.2	3773.5	3762.2	3761.1	3756.6	3750.9
32.5°	4002.7	4000.5	4010.6	4003.9	3985.8	3975.6	3966.6	3962.1
35°	4256.8	4257.9	4270.3	4265.8	4245.5	4238.7	4222.9	4220.7
37.5°	4534.6	4552.6	4574.1	4578.6	4561.7	4557.1	4540.2	4531.2
40°	4860.9	4884.6	4917.3	4925.2	4907.2	4903.8	4880.1	4867.7
42.5°	5208.6	5249.3	5289.9	5296.7	5278.7	5260.6	5238.0	5229.0
45°	5597.1	5645.6	5698.7	5712.2	5685.1	5663.7	5634.3	5634.3
47.5°	6032.9	6093.9	6153.7	6191.0	6166.1	6143.6	6108.6	6086.0
50°	6547.8	6631.3	6709.3	6747.6	6708.1	6665.2	6604.2	6583.9
52.5°	7193.6	7284.0	7351.7	7331.4	7270.4	7210.6	7144.0	7116.9
55°	8017.9	8048.4	8048.4	7971.6	7849.7	7749.2	7644.2	7609.2
57.5°	9048.8	8931.4	8750.7	8521.5	8233.6	7982.9	7813.5	7733.4
60°	10260.3	9695.8	9057.8	8431.2	7916.3	7491.7	7239.9	7124.8
62.5°	11067.7	9590.8	8312.6	7306.6	6565.9	6054.4	5706.6	5571.1
65°	10343.9	7998.7	6287.0	5083.3	4276.0	3755.5	3411.1	3284.6
67.5°	7576.4	5012.2	3347.9	2399.4	1758.0	1402.4	1261.2	1202.5
70°	3400.9	1764.8	1081.7	844.6	728.3	668.4	642.5	633.4
72.5°	1025.2	741.8	625.5	564.6	518.3	488.9	467.5	465.2
75°	618.8	514.9	457.3	421.2	391.8	368.1	356.8	353.4
77.5°	432.5	378.3	351.2	325.2	302.6	284.5	274.4	266.5
80°	303.7	277.8	265.3	250.7	236.0	219.1	204.4	197.6
82.5°	203.2	197.6	197.6	188.6	176.1	160.3	131.0	124.2
85°	131.0	129.8	132.1	128.7	119.7	102.8	84.7	80.2
87.5°	61.0	62.1	68.9	67.7	65.5	54.2	42.9	40.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)