

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: P451963

Luminaire Tested: **GALN-SA2D-827-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451963
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11548 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

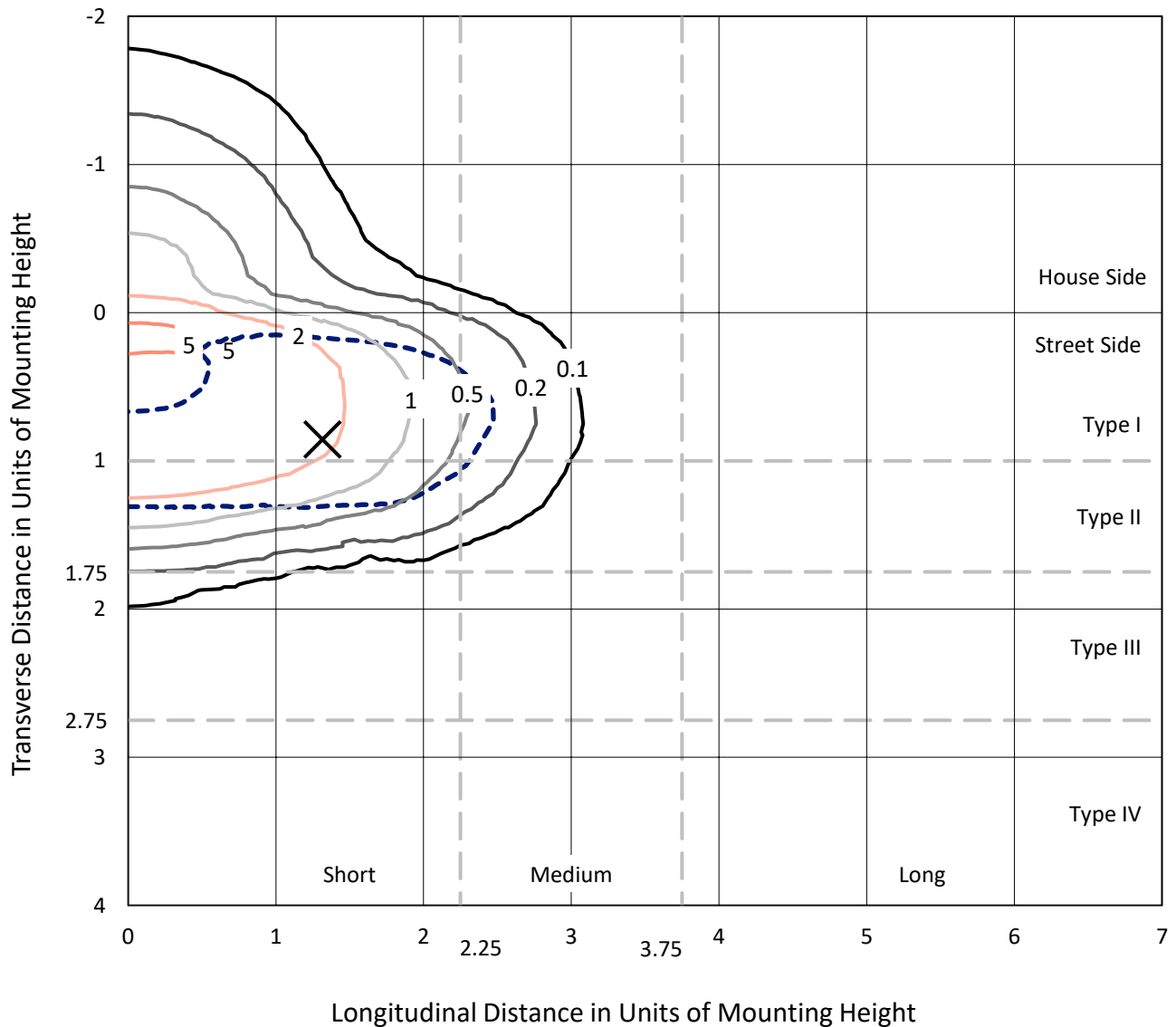
Input Watts (W): 125
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

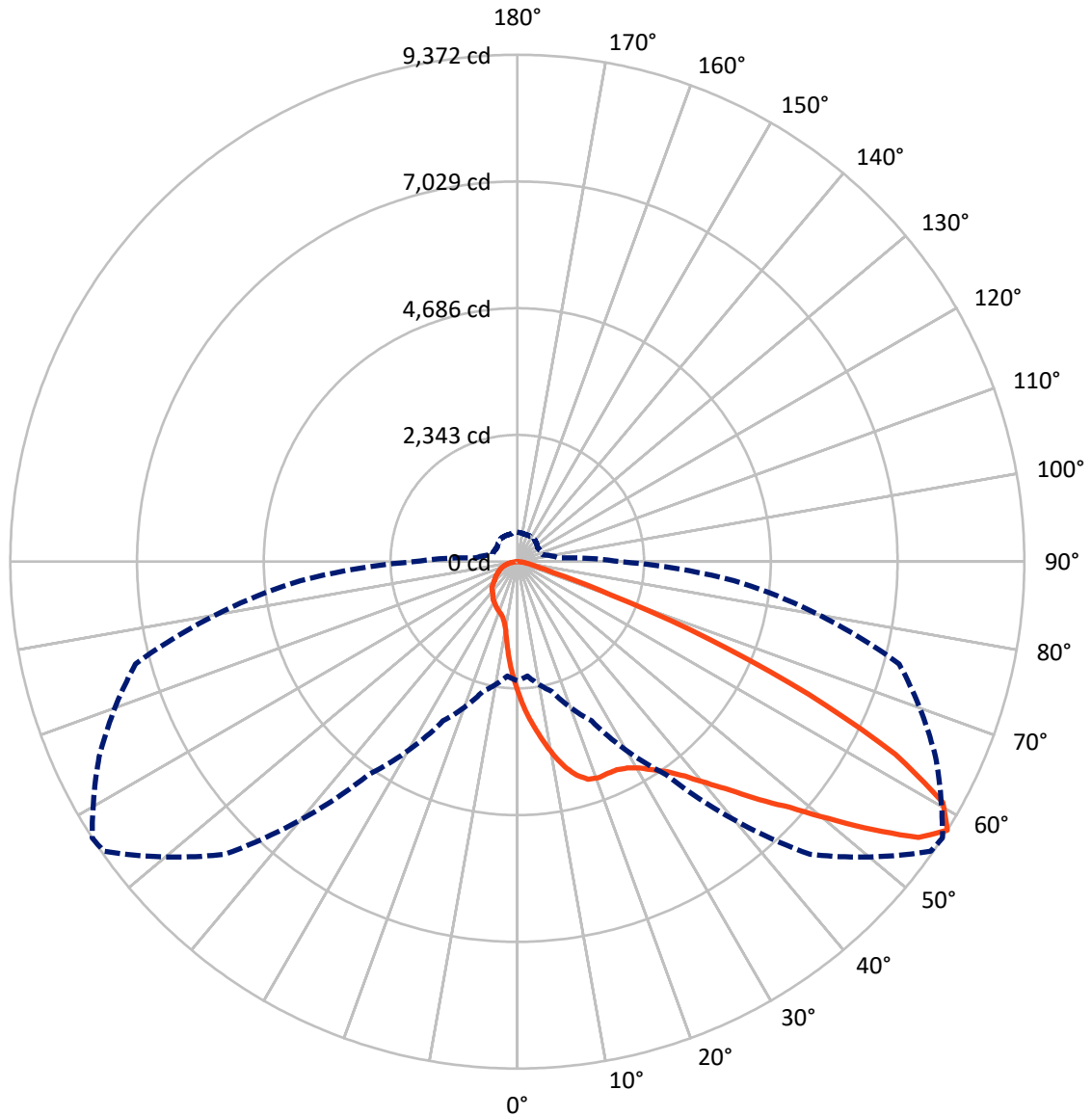
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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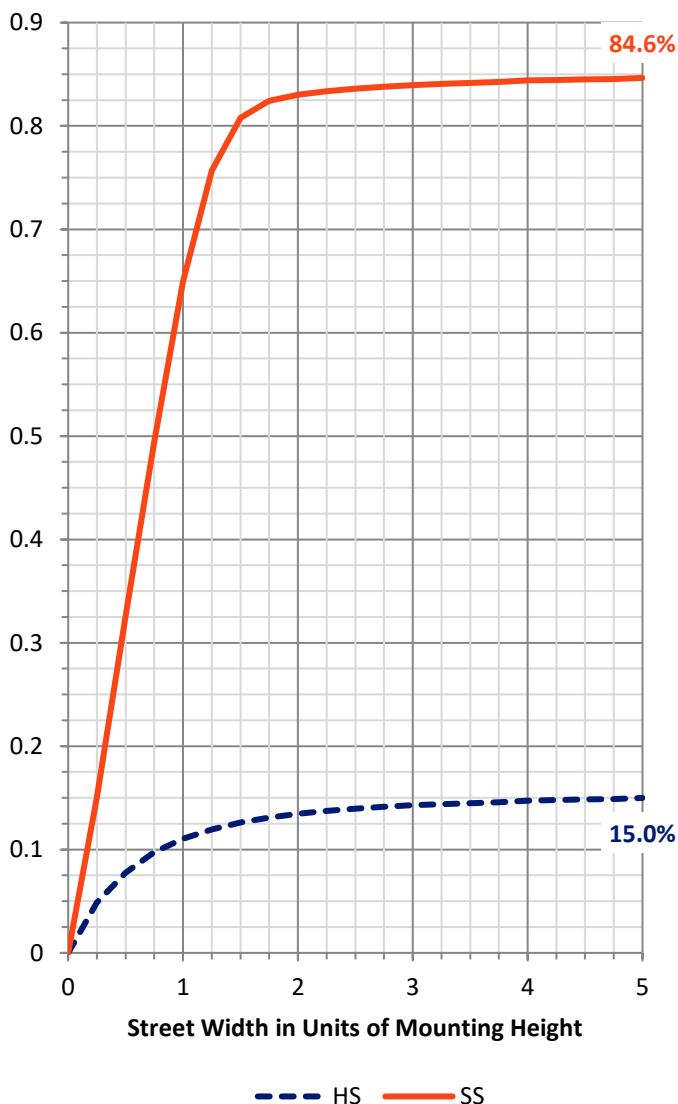
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1756.1	0.0	1756.1
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	9791.9	0.0	9791.9
	% Fixture	84.8	0.0	84.8
Total	Lumens	11548.0	0.0	11548.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.2	2.0
10°-20°	687.2	6.0
20°-30°	1141.1	9.9
30°-40°	1718.8	14.9
40°-50°	2580.6	22.3
50°-60°	2892.5	25.0
60°-70°	1692.8	14.7
70°-80°	500.7	4.3
80°-90°	101.2	0.9
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°	11548.0	100.0
0°-180°	11548.0	100.0

Coefficient of Utilization



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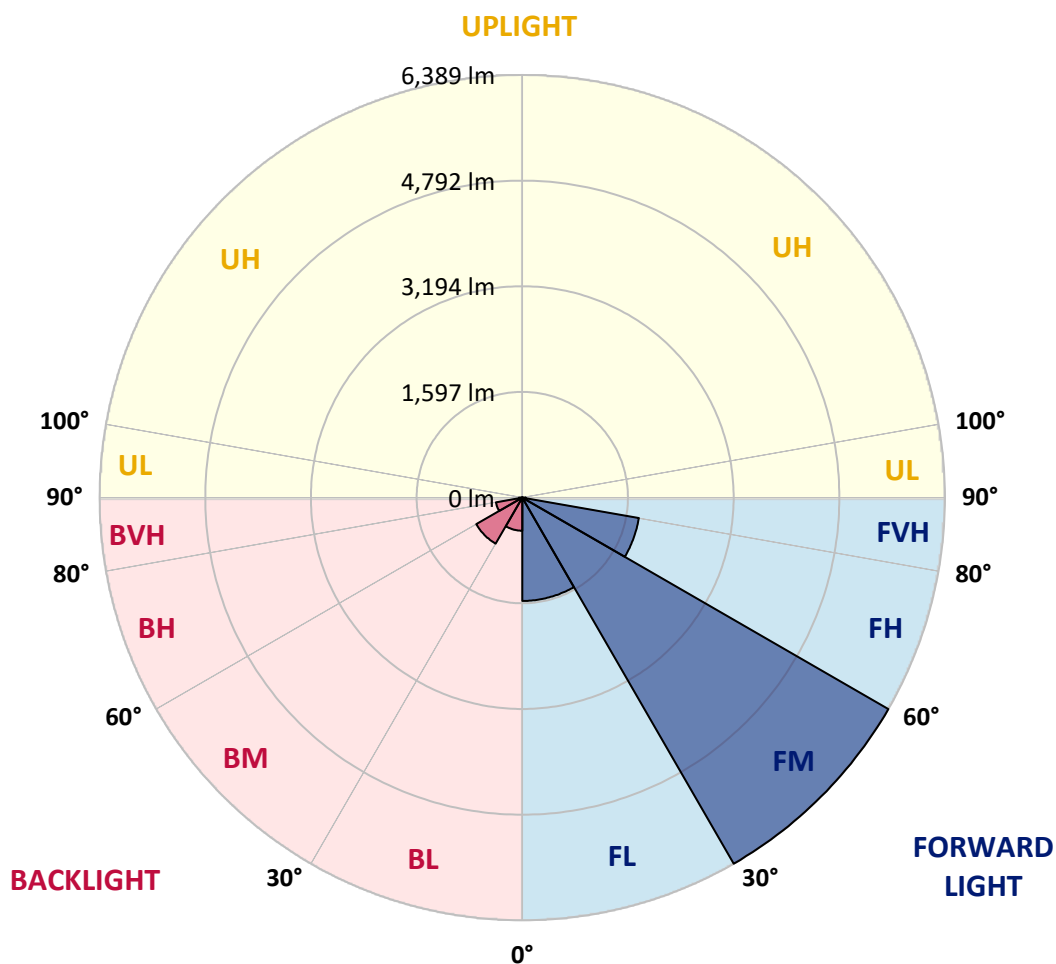
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1561.0	13.5			
FM	(30°-60°)	6388.9	55.3			
FH	(60°-80°)	1789.5	15.5			G1/1800
FVH	(80°-90°)	52.5	0.5			G1/100
BL	(0°-30°)	500.4	4.3	B2/1000		
BM	(30°-60°)	803.0	7.0	B1/1000		
BH	(60°-80°)	404.1	3.5	B1/500		G1/500
BVH	(80°-90°)	48.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1
2.5°	3014.6	2981.7	2955.8	2933.1	2903.4	2823.1	2742.8	2741.5	2677.7	2579.1	2477.9
5°	3505.8	3461.5	3467.2	3396.4	3325.6	3209.3	3039.3	3030.4	2894.5	2709.9	2522.2
7.5°	3825.6	3826.3	3808.6	3768.1	3691.6	3559.5	3366.7	3323.1	3134.1	2854.1	2572.8
10°	3809.2	3826.3	3856.0	3890.7	3914.1	3849.0	3673.3	3620.2	3374.3	3028.5	2629.0
12.5°	3590.5	3617.0	3659.4	3746.6	3887.6	3995.0	3935.0	3892.0	3652.4	3202.4	2691.0
15°	3453.9	3469.7	3493.1	3551.9	3703.6	3960.9	4116.4	4093.7	3914.8	3398.9	2760.5
17.5°	3412.2	3428.0	3435.6	3471.6	3579.7	3843.3	4187.8	4228.3	4147.4	3579.7	2830.7
20°	3453.9	3461.5	3461.5	3483.0	3567.7	3774.4	4184.7	4266.2	4338.3	3796.6	2896.4
22.5°	3563.3	3566.5	3562.0	3569.6	3632.8	3793.4	4155.0	4256.1	4492.5	3980.5	2947.6
25°	3740.9	3746.0	3716.9	3699.2	3745.4	3876.8	4171.4	4264.3	4613.3	4156.2	2981.7
27.5°	3942.6	3948.9	3913.5	3872.4	3893.9	3979.9	4235.9	4319.3	4703.7	4329.4	3003.2
30°	4189.7	4192.3	4132.8	4083.5	4069.6	4133.5	4345.9	4423.6	4816.2	4533.6	3035.5
32.5°	4442.6	4461.6	4385.1	4315.5	4292.1	4311.7	4508.3	4583.6	4950.2	4753.0	3087.3
35°	4786.5	4789.6	4698.0	4613.3	4536.1	4561.4	4716.3	4770.7	5135.4	5006.4	3160.6
37.5°	5215.7	5244.8	5118.3	4960.3	4865.5	4828.8	4967.9	5027.3	5395.2	5317.5	3271.3
40°	5692.3	5703.0	5595.0	5496.3	5323.1	5216.9	5313.0	5377.5	5715.7	5688.5	3399.6
42.5°	5991.9	6015.3	6023.5	6013.4	5883.2	5704.9	5741.6	5771.9	6095.0	6036.8	3531.1
45°	6093.1	6127.8	6245.4	6494.5	6508.4	6332.6	6247.3	6276.4	6508.4	6388.3	3656.9
47.5°	5925.6	5985.0	6201.8	6712.6	7095.0	7108.3	6851.0	6787.1	6885.1	6679.7	3747.9
50°	5492.5	5505.2	5837.1	6576.6	7370.0	7849.8	7583.6	7464.8	7242.9	6895.2	3810.5
52.5°	4822.5	4837.0	5115.2	5945.2	7200.6	8368.1	8440.8	8228.4	7606.4	7062.8	3851.5
55°	3579.7	3663.8	3969.8	4771.9	6397.8	8319.4	9122.2	9001.5	8045.7	7195.5	3916.0
57.5°	2201.1	2123.9	2486.8	3246.6	4811.7	7650.6	9332.7	9371.9	8529.3	7306.8	4024.1
60°	1012.7	1027.8	1177.7	1674.5	2933.1	5985.0	8790.4	9038.1	8796.7	7303.0	4051.3
62.5°	697.9	684.0	646.0	735.2	1337.6	3785.2	7425.0	7844.7	8260.6	7076.0	3943.2
65°	623.9	610.0	536.7	512.0	614.4	1649.9	5397.7	5927.5	6955.3	6503.3	3673.9
67.5°	582.8	563.9	488.0	440.0	438.7	656.8	3182.8	3820.6	5158.8	5498.2	3183.4
70°	539.8	524.7	449.4	396.3	373.6	412.8	1398.9	1831.3	3349.6	3962.2	2479.8
72.5°	496.9	479.2	411.5	354.6	324.9	309.1	536.0	697.2	1892.6	2375.5	1520.3
75°	434.3	425.4	367.9	321.1	288.9	249.7	340.1	388.1	905.2	1091.1	763.0
77.5°	379.9	370.4	326.8	280.7	257.3	202.9	241.5	263.6	381.8	442.5	344.5
80°	278.1	287.6	275.6	247.8	229.5	159.3	162.5	180.8	226.9	251.0	210.5
82.5°	176.4	194.1	212.4	190.9	173.8	125.8	112.5	119.5	154.9	164.4	93.6
85°	74.0	75.2	123.3	116.3	99.2	74.6	67.6	71.4	82.8	86.6	43.6
87.5°	28.4	27.8	43.6	40.5	31.0	21.5	21.5	24.0	32.9	30.3	13.9
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°	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1	2426.1
2.5°	2434.3	2389.4	2300.3	2189.7	2108.8	2017.7	1937.5	1879.9	1858.5	1848.3	1829.4
5°	2432.4	2343.9	2159.3	1965.9	1810.4	1651.1	1516.5	1429.2	1421.7	1363.5	1357.8
7.5°	2433.1	2297.8	2003.8	1719.4	1482.3	1319.2	1208.0	1178.9	1144.1	1135.3	1139.7
10°	2435.0	2239.0	1837.0	1475.4	1245.9	1139.1	1097.4	1086.0	1087.3	1091.1	1091.7
12.5°	2437.5	2182.1	1663.8	1290.2	1113.2	1068.9	1064.5	1074.6	1085.4	1093.6	1095.5
15°	2440.6	2117.0	1495.0	1141.0	1046.8	1043.0	1057.5	1074.6	1089.8	1101.8	1103.7
17.5°	2436.8	2041.1	1353.4	1049.3	1010.1	1028.5	1052.5	1074.0	1087.9	1099.3	1100.5
20°	2428.0	1956.4	1216.8	984.9	987.4	1017.1	1043.0	1063.2	1078.4	1084.1	1088.5
22.5°	2393.9	1855.3	1098.0	934.9	960.2	1001.3	1032.3	1044.3	1027.2	1015.2	1018.4
25°	2335.7	1723.8	987.4	894.5	935.5	979.2	1010.8	981.7	967.8	962.7	965.3
27.5°	2263.0	1579.7	903.9	852.1	903.9	954.5	945.7	940.6	934.3	926.1	928.0
30°	2184.6	1438.7	833.1	819.2	869.8	898.9	902.7	910.9	903.9	891.3	896.4
32.5°	2111.9	1306.0	779.4	791.4	845.8	841.4	869.8	879.3	847.0	804.7	806.6
35°	2050.0	1182.7	739.0	764.2	804.7	806.6	835.0	802.2	767.4	747.2	748.4
37.5°	2003.2	1086.6	712.4	740.9	752.2	776.3	761.1	744.0	739.6	725.7	726.3
40°	1975.4	1002.6	695.3	722.5	720.6	737.1	688.4	705.5	711.8	707.3	708.0
42.5°	1947.6	943.1	677.6	697.2	696.6	664.4	653.6	668.2	684.6	686.5	685.2
45°	1925.5	897.0	659.3	658.7	671.3	620.7	617.6	626.4	649.8	661.2	660.6
47.5°	1900.8	858.4	631.5	613.8	617.6	593.6	588.5	592.3	620.7	639.1	644.1
50°	1869.8	819.9	596.7	572.7	556.9	568.3	569.5	570.2	598.6	619.5	623.9
52.5°	1845.2	790.8	556.9	539.2	520.2	545.5	555.0	556.3	573.3	590.4	593.6
55°	1859.7	774.4	517.7	505.1	488.0	522.1	540.5	543.0	546.8	559.4	561.3
57.5°	1903.3	778.1	486.1	469.7	457.0	494.3	525.3	527.2	524.7	539.8	542.4
60°	1916.6	776.3	462.7	430.5	422.9	464.6	503.2	507.0	506.3	528.5	532.9
62.5°	1861.0	752.2	439.3	397.6	392.6	434.3	472.2	487.4	490.5	522.1	527.8
65°	1730.1	702.9	408.4	362.8	362.8	402.0	442.5	463.3	472.2	514.6	520.9
67.5°	1557.6	644.8	376.7	333.1	331.9	371.1	410.9	432.4	446.3	503.8	507.6
70°	1292.7	566.4	337.6	300.9	300.9	336.3	372.3	398.2	418.5	483.6	483.6
72.5°	885.6	470.9	290.1	264.2	264.9	297.7	334.4	363.5	387.5	443.1	444.4
75°	560.1	367.9	238.3	225.0	227.6	258.5	296.5	326.8	374.9	438.1	440.0
77.5°	297.7	258.5	189.6	186.5	189.6	218.1	260.4	302.2	376.1	379.9	373.6
80°	192.8	183.3	149.8	143.5	144.8	175.7	232.0	287.0	302.2	305.9	292.0
82.5°	104.9	116.3	106.2	99.9	99.9	137.2	197.9	228.2	216.8	180.2	171.9
85°	44.9	54.4	55.0	48.0	46.1	84.7	132.7	124.5	115.7	110.6	109.4
87.5°	12.6	17.7	17.7	13.3	10.1	23.4	26.5	7.6	0.0	0.6	1.3
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)