

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: P321068

Luminaire Tested: **GLEON-SA4A-827-U-AFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321068
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA4A-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14177 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

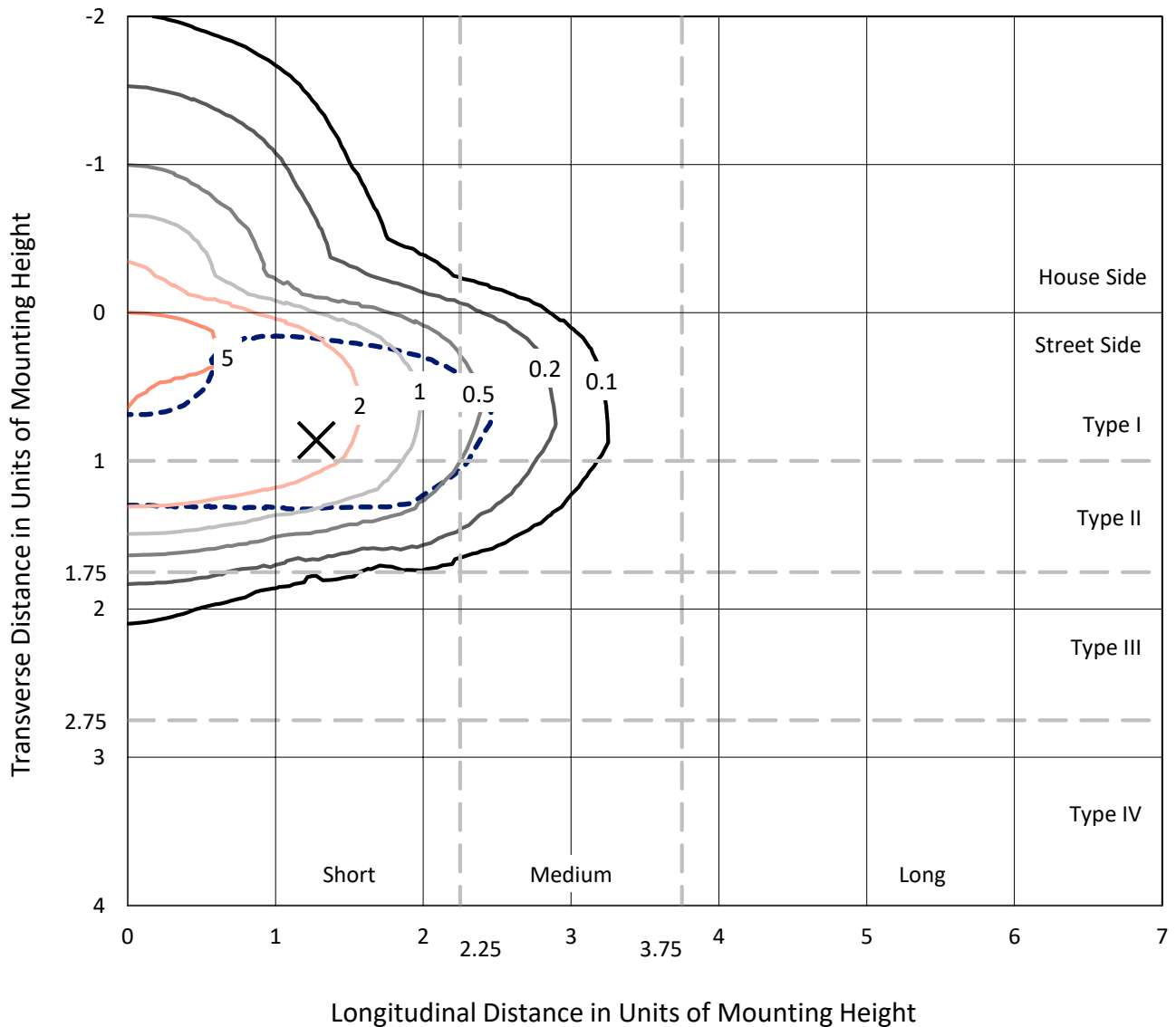
Input Watts (W): 129
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

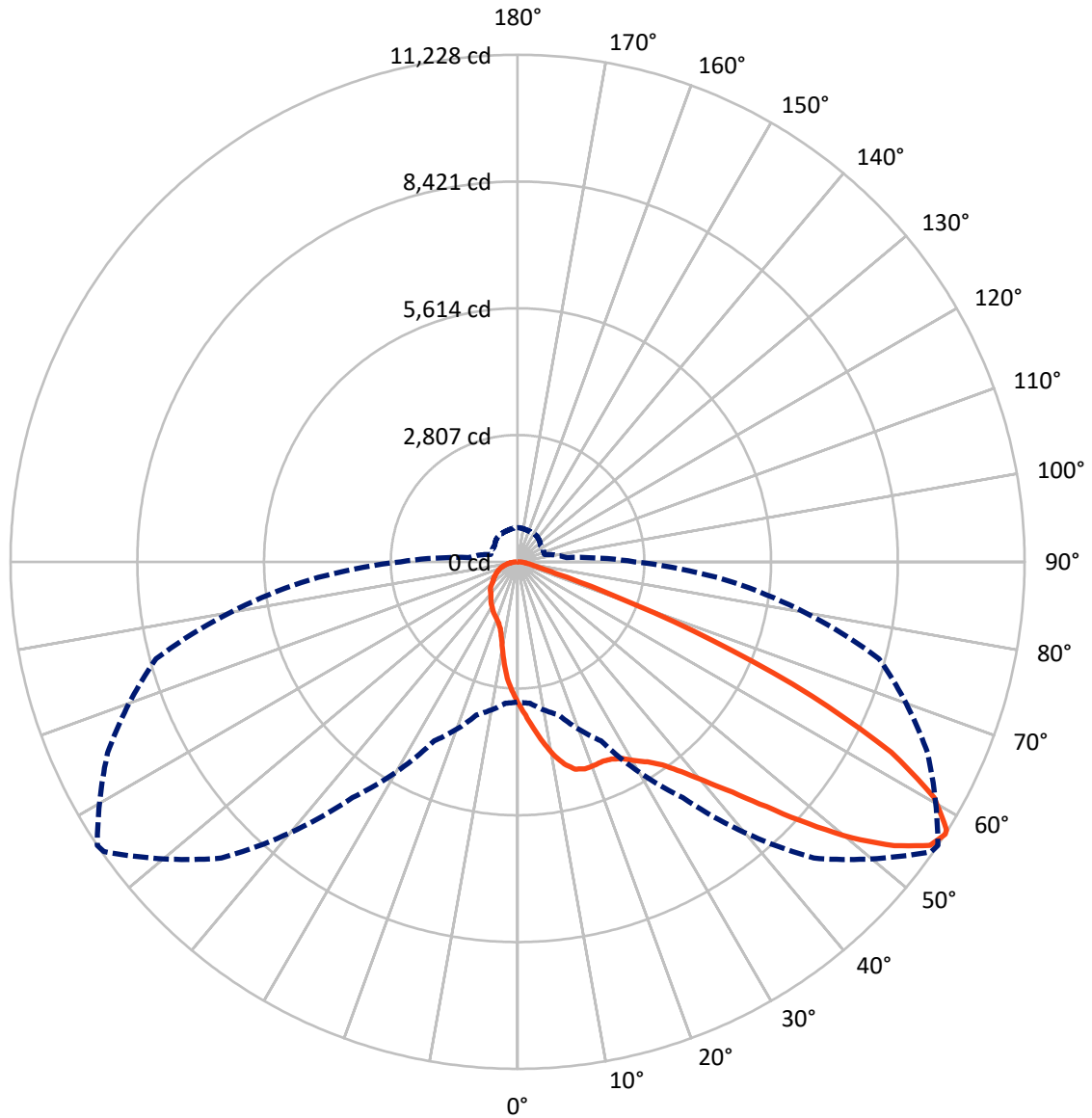
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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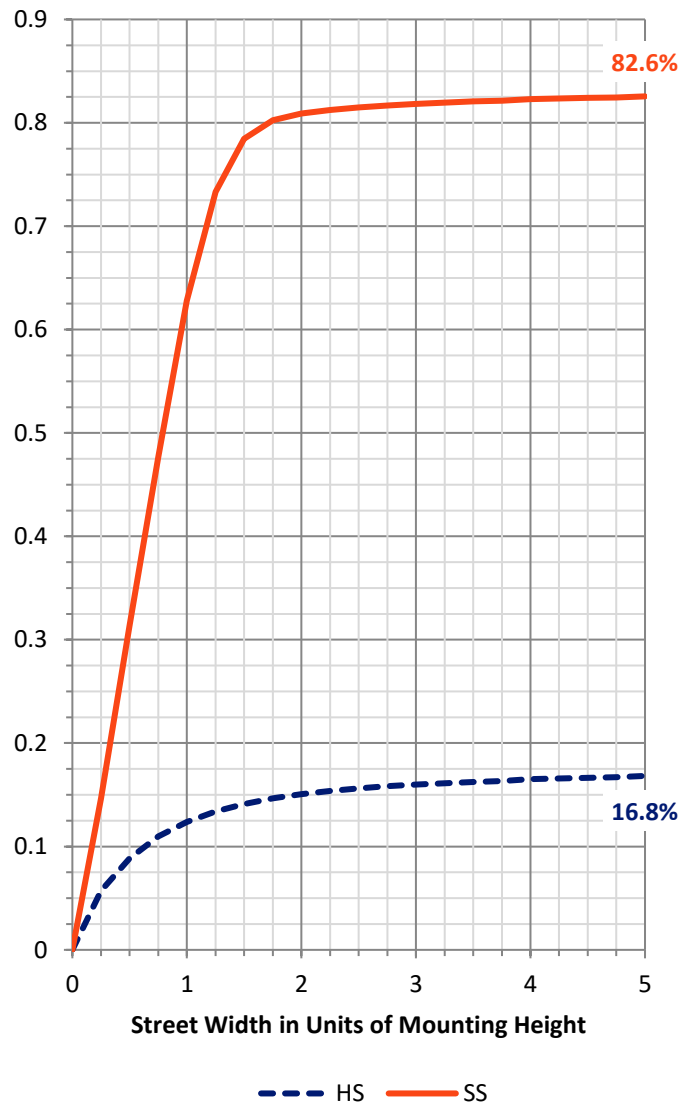
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2443.8	0.0	2443.8
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	11733.2	0.0	11733.2
	% Fixture	82.8	0.0	82.8
Total	Lumens	14177.0	0.0	14177.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.4	2.1
10°-20°	849.2	6.0
20°-30°	1383.2	9.8
30°-40°	2067.8	14.6
40°-50°	3136.4	22.1
50°-60°	3515.3	24.8
60°-70°	2076.3	14.6
70°-80°	680.3	4.8
80°-90°	168.1	1.2
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°	14177.0	100.0
0°-180°	14177.0	100.0

Coefficient of Utilization



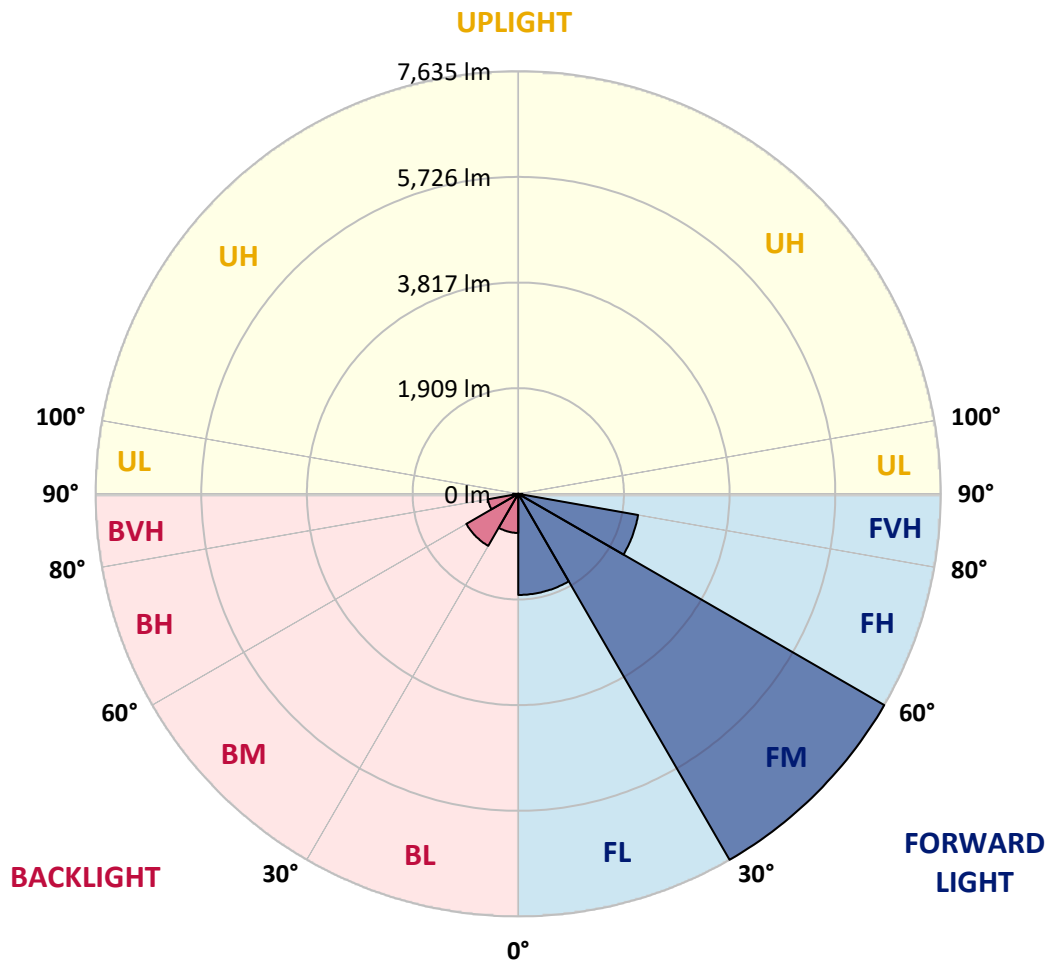
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1826.2	12.9			
FM (30°-60°)	7634.8	53.9			
FH (60°-80°)	2198.2	15.5			G2/5000
FVH (80°-90°)	74.0	0.5			G1/100
BL (0°-30°)	706.6	5.0	B2/1000		
BM (30°-60°)	1084.7	7.7	B2/2500		
BH (60°-80°)	558.4	3.9	B2/1000		G2/1000
BVH (80°-90°)	94.1	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5
2.5°	3610.7	3643.9	3629.2	3578.6	3539.6	3484.5	3423.2	3404.6	3339.8	3267.2	3180.0
5°	4182.2	4165.7	4141.8	4062.9	3979.6	3882.6	3728.6	3704.3	3560.1	3395.9	3222.4
7.5°	4507.7	4506.2	4492.1	4445.8	4369.8	4243.1	4057.5	4028.8	3811.0	3546.9	3278.0
10°	4460.4	4457.0	4480.4	4528.6	4551.5	4525.2	4368.8	4340.1	4072.6	3714.0	3342.3
12.5°	4192.0	4193.9	4231.4	4332.8	4470.7	4636.3	4611.0	4596.9	4344.0	3903.1	3420.2
15°	3983.0	3987.3	4017.1	4105.3	4268.0	4568.6	4758.1	4763.0	4606.6	4111.6	3511.3
17.5°	3891.4	3900.6	3914.3	3976.1	4125.2	4433.6	4793.2	4819.5	4836.6	4327.9	3599.0
20°	3920.6	3929.4	3933.3	3972.7	4095.0	4351.8	4768.8	4816.1	5012.9	4531.6	3686.7
22.5°	4051.7	4057.0	4059.5	4069.7	4164.7	4375.2	4752.8	4802.5	5140.6	4714.3	3753.0
25°	4269.0	4265.1	4249.5	4236.3	4300.1	4467.7	4789.8	4837.0	5244.4	4879.9	3796.4
27.5°	4529.1	4524.3	4494.1	4458.0	4494.5	4612.0	4896.5	4934.0	5337.4	5034.9	3818.3
30°	4841.4	4828.8	4771.8	4728.9	4743.0	4828.3	5072.4	5106.5	5481.1	5210.7	3839.7
32.5°	5202.5	5188.8	5106.5	5035.3	5035.3	5106.5	5253.6	5281.9	5602.9	5409.5	3874.3
35°	5654.6	5637.5	5530.4	5411.0	5377.4	5413.4	5500.6	5520.6	5822.2	5660.0	3937.2
37.5°	6187.6	6164.7	6025.8	5866.0	5792.5	5790.5	5853.4	5894.3	6172.5	5988.8	4043.9
40°	6722.1	6706.0	6584.7	6459.0	6314.8	6268.5	6365.4	6378.1	6630.5	6397.1	4180.3
42.5°	7135.2	7132.3	7109.9	7126.5	6978.8	6885.3	6961.3	6971.5	7189.8	6839.0	4325.5
45°	7353.5	7358.4	7467.0	7707.7	7762.3	7694.1	7731.6	7734.5	7829.0	7284.8	4458.5
47.5°	7178.6	7203.9	7478.7	8017.1	8463.9	8690.4	8628.1	8664.1	8448.8	7667.8	4562.7
50°	6497.0	6528.2	6995.9	7879.2	8791.3	9654.6	9622.0	9613.7	8948.6	7948.4	4619.3
52.5°	5652.6	5677.0	6062.9	7162.5	8551.1	10187.6	10487.3	10444.4	9393.0	8158.4	4630.0
55°	4366.9	4404.9	4774.7	5732.1	7579.6	9984.0	11123.6	11085.1	9797.8	8268.5	4617.3
57°	3104.5	3144.5	3511.8	4374.7	6376.2	9279.0	11186.9	11227.8	10016.6	8287.0	4631.4
57.5°	2770.3	2811.2	3175.2	4013.2	6001.0	9024.2	11132.3	11200.5	10056.1	8284.1	4639.2
60°	1394.9	1410.5	1642.4	2240.2	3793.4	7295.5	10420.5	10596.4	10091.6	8140.8	4672.9
62.5°	867.2	856.0	848.7	1031.9	1845.6	4838.0	8951.6	9290.2	9411.0	7793.9	4591.5
65°	762.5	741.5	661.1	646.5	815.1	2349.8	6741.1	7162.5	7956.7	7247.3	4397.6
67.5°	716.2	695.7	605.1	550.6	551.0	931.6	4185.2	4659.7	6198.3	6323.0	3940.1
70°	668.5	649.9	565.2	500.9	469.2	516.0	1925.5	2285.5	4040.5	4970.1	3293.1
72.5°	607.1	594.4	514.0	447.7	414.1	386.4	737.2	870.6	2339.1	3337.9	2287.0
75°	542.8	531.1	462.4	399.0	358.1	304.0	415.1	447.3	1188.3	1707.7	1125.9
77.5°	472.1	465.3	411.2	352.7	320.1	251.9	293.8	309.4	509.6	732.3	564.7
80°	375.6	388.8	359.6	314.3	284.0	201.7	208.0	218.3	296.7	357.6	320.6
82.5°	244.6	267.5	281.6	255.3	233.9	158.8	149.6	154.0	193.4	218.3	139.3
85°	101.8	114.5	185.1	167.1	155.4	116.0	100.4	102.3	119.9	124.2	57.0
87.5°	45.3	48.2	81.4	76.5	65.8	40.0	42.9	46.8	63.8	60.4	21.9
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°	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5	3144.5
2.5°	3147.4	3106.5	3036.3	2958.8	2895.5	2844.8	2793.7	2758.6	2717.7	2695.7	2684.5
5°	3149.8	3069.4	2921.8	2770.3	2634.8	2511.1	2393.2	2302.6	2217.8	2172.0	2159.3
7.5°	3160.1	3039.2	2800.5	2551.0	2310.4	2090.6	1921.1	1814.9	1738.4	1704.3	1694.5
10°	3168.3	3003.7	2650.4	2281.1	1953.7	1731.1	1599.5	1540.1	1513.8	1509.4	1505.0
12.5°	3187.8	2967.1	2492.6	1999.5	1676.5	1522.5	1476.7	1472.8	1480.2	1490.9	1490.9
15°	3218.5	2931.1	2312.3	1757.9	1500.1	1446.0	1455.3	1476.7	1496.7	1513.3	1515.7
17.5°	3240.9	2886.7	2118.4	1564.4	1406.1	1420.7	1453.8	1484.1	1504.5	1520.6	1522.1
20°	3257.0	2818.0	1911.3	1416.8	1352.0	1397.3	1438.7	1465.5	1479.7	1495.7	1498.2
22.5°	3248.7	2726.0	1727.7	1311.1	1308.2	1363.2	1402.7	1434.8	1424.1	1408.5	1418.8
25°	3208.8	2599.3	1538.6	1232.2	1261.9	1317.4	1366.1	1344.7	1308.7	1301.8	1305.7
27.5°	3137.7	2437.5	1363.7	1159.1	1208.3	1275.0	1272.1	1250.7	1238.0	1229.2	1234.6
30°	3061.2	2262.1	1210.7	1095.3	1148.8	1203.9	1192.7	1192.2	1179.5	1165.4	1172.2
32.5°	2985.6	2085.8	1089.4	1042.6	1104.0	1111.3	1135.7	1143.0	1118.2	1088.4	1086.5
35°	2919.9	1919.1	997.3	994.9	1049.9	1050.9	1086.5	1076.3	1014.4	983.7	983.7
37.5°	2870.7	1753.0	927.2	952.0	978.8	1004.1	1022.2	979.8	969.6	952.5	952.0
40°	2849.2	1606.8	883.3	919.4	928.6	960.8	914.5	931.1	935.9	927.2	927.2
42.5°	2826.8	1479.7	845.3	894.5	893.1	888.7	865.3	886.7	906.2	906.7	905.2
45°	2804.4	1370.0	811.7	841.4	861.9	814.6	819.0	841.9	869.2	878.9	878.9
47.5°	2779.5	1283.3	781.0	785.4	817.1	785.4	782.0	799.5	831.7	847.3	850.7
50°	2725.0	1205.4	745.9	736.2	744.9	755.7	758.6	766.9	802.4	827.3	833.1
52.5°	2649.5	1135.7	701.1	690.9	690.9	731.3	744.9	747.4	777.6	807.3	813.2
55°	2586.6	1091.4	654.8	652.9	650.9	705.5	728.9	732.8	753.7	777.1	780.0
57°	2591.0	1087.9	619.2	621.2	620.7	679.2	713.8	722.0	732.8	752.7	756.2
57.5°	2593.4	1090.4	611.5	612.4	611.9	671.9	709.4	718.6	726.9	747.9	751.3
60°	2630.0	1096.7	579.8	569.1	571.5	632.9	684.5	696.2	701.6	729.4	733.7
62.5°	2575.9	1068.5	554.4	528.6	528.6	592.0	649.9	668.5	676.7	714.3	721.6
65°	2419.0	989.0	524.7	482.8	487.7	551.0	608.5	638.7	651.4	698.2	706.0
67.5°	2176.9	897.0	493.1	441.9	446.8	508.2	565.7	598.3	618.3	680.6	687.0
70°	1861.6	784.4	450.2	398.5	404.4	461.4	515.0	552.0	581.7	664.1	666.0
72.5°	1372.5	643.1	390.3	350.8	357.1	406.8	463.8	506.7	546.7	622.7	621.7
75°	816.1	502.8	324.0	302.6	306.9	353.2	417.5	469.7	529.6	606.6	615.8
77.5°	495.0	378.6	264.1	253.4	258.7	306.0	384.4	440.0	522.3	572.0	569.1
80°	299.1	270.4	211.0	204.1	209.5	261.6	355.7	417.5	456.5	488.7	488.7
82.5°	156.4	165.2	154.9	149.6	156.9	212.4	323.5	364.4	403.4	346.4	323.5
85°	63.8	86.2	94.0	93.5	97.9	147.1	279.2	311.8	260.2	247.0	252.9
87.5°	21.4	36.5	45.8	39.5	41.4	92.6	193.4	150.5	178.8	124.7	118.4
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)