

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: P648393

Luminaire Tested: **GALN-SA4B-835-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P648393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4B-835-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14111.2 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

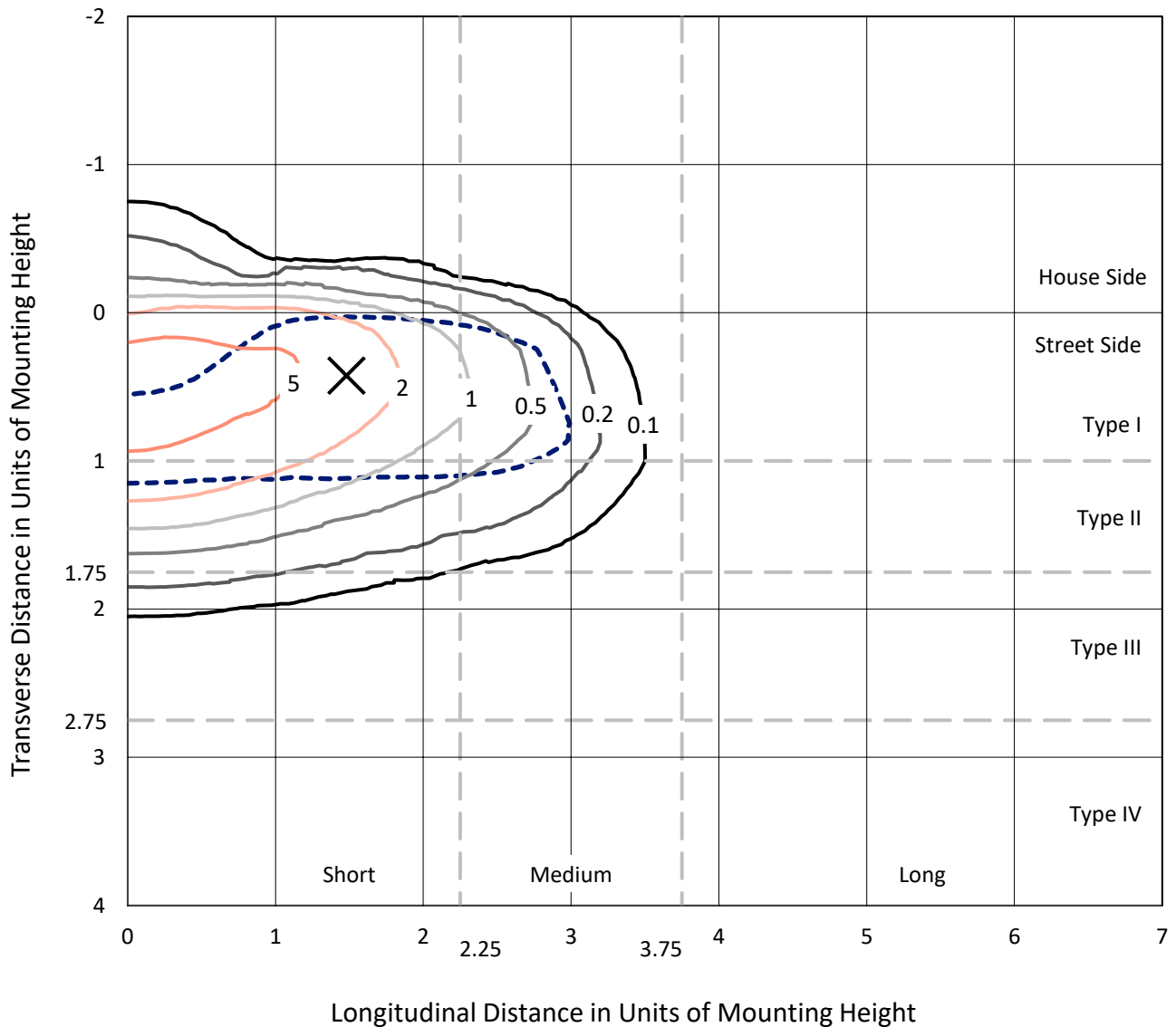
Input Watts (W): 164
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

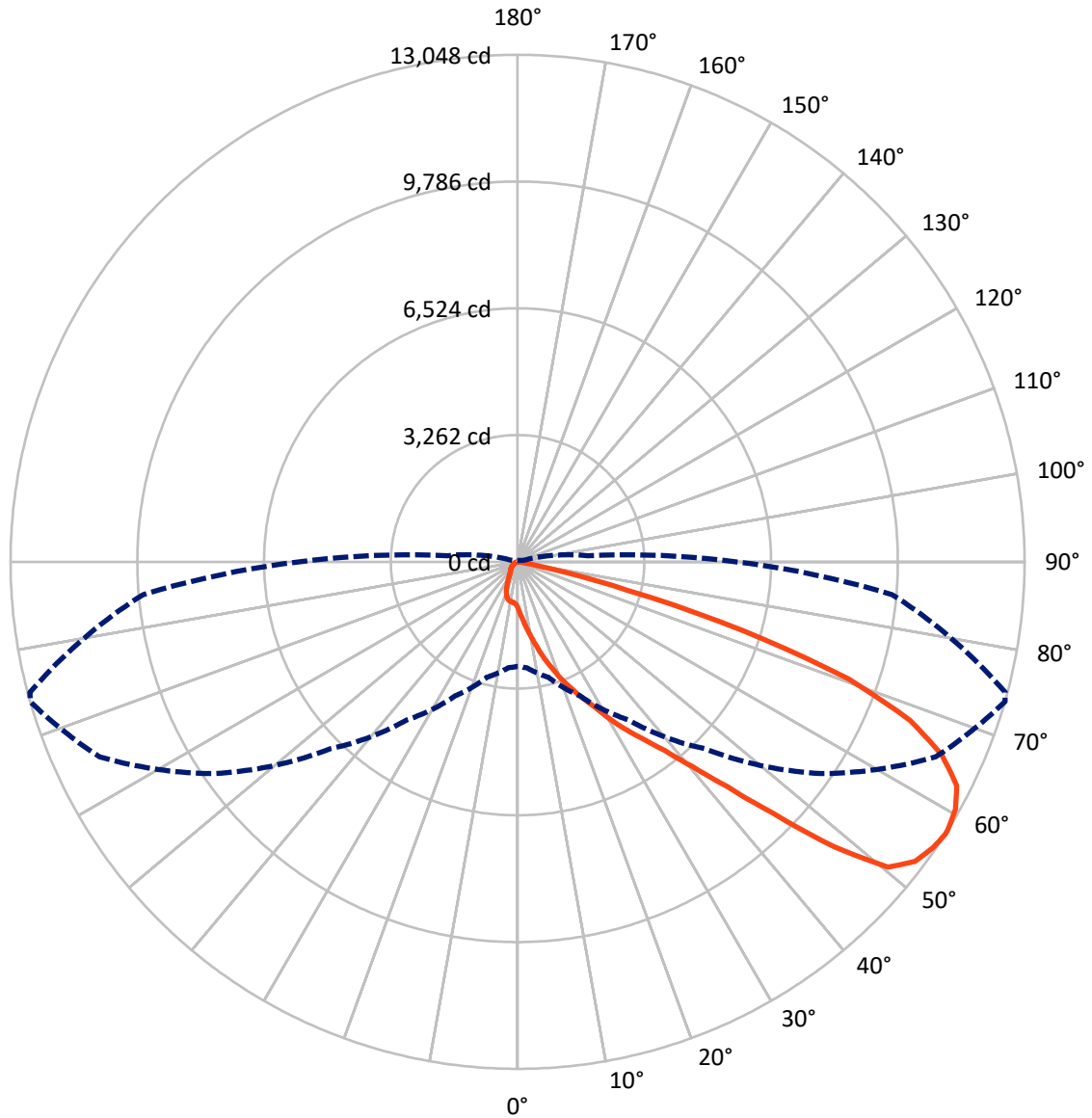
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

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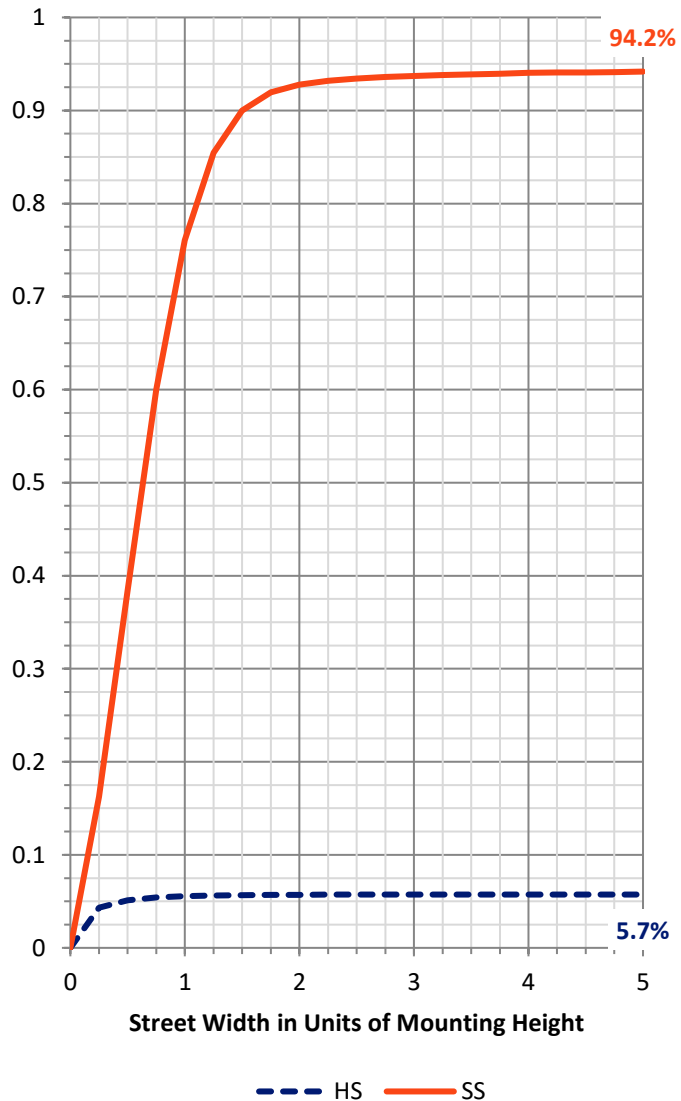
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	813.9	0.0	813.9
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	13297.3	0.0	13297.3
	% Fixture	94.2	0.0	94.2
Total	Lumens	14111.2	0.0	14111.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	1.0
10°-20°	562.3	4.0
20°-30°	1203.1	8.5
30°-40°	2211.2	15.7
40°-50°	3389.9	24.0
50°-60°	3586.0	25.4
60°-70°	2341.8	16.6
70°-80°	639.9	4.5
80°-90°	34.4	0.2
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°	14111.2	100.0
0°-180°	14111.2	100.0

Coefficient of Utilization



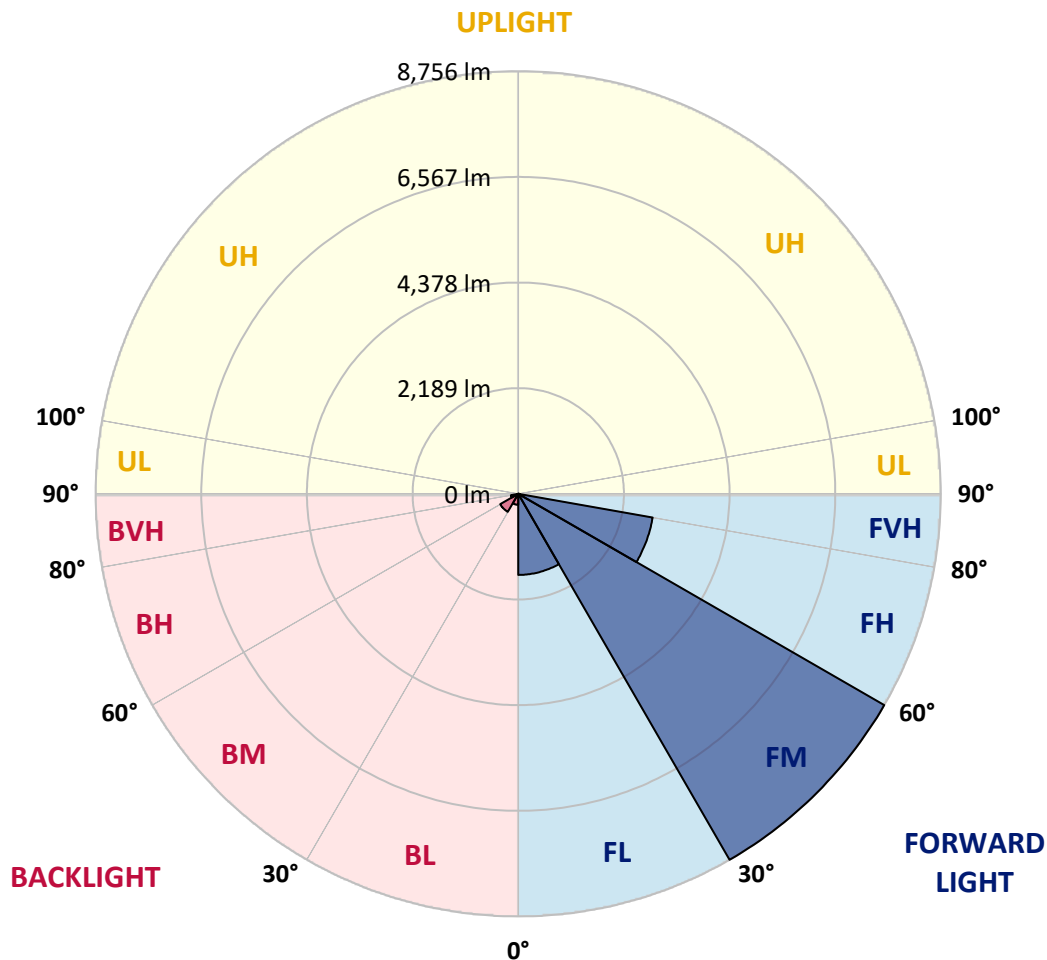
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1680.6	11.9			
FM (30°-60°)	8756.3	62.1			
FH (60°-80°)	2828.8	20.0			G2/5000
FVH (80°-90°)	31.6	0.2			G1/100
BL (0°-30°)	227.3	1.6	B1/500		
BM (30°-60°)	430.9	3.1	B1/1000		
BH (60°-80°)	152.8	1.1	B1/500		G1/500
BVH (80°-90°)	2.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8
2.5°	1729.3	1713.8	1682.6	1671.9	1626.1	1555.0	1492.6	1408.8	1342.5	1335.7	1255.9
5°	2315.9	2280.8	2266.2	2196.0	2085.9	1982.6	1805.4	1670.9	1516.0	1504.3	1343.5
7.5°	2881.0	2832.2	2817.6	2751.4	2622.7	2460.0	2230.1	1985.6	1740.1	1717.7	1461.4
10°	3290.2	3297.0	3270.7	3226.8	3122.5	2956.9	2673.4	2339.2	1989.4	1961.2	1594.0
12.5°	3583.4	3582.4	3587.3	3586.3	3530.8	3405.1	3106.9	2722.1	2264.2	2208.7	1745.9
15°	3774.4	3777.3	3791.9	3842.6	3848.4	3770.5	3522.0	3088.5	2582.8	2513.7	1910.5
17.5°	3967.2	3987.7	4011.1	4058.8	4101.7	4070.5	3895.2	3470.3	2871.2	2819.6	2086.9
20°	4285.8	4314.1	4300.5	4329.7	4352.1	4355.0	4219.6	3823.1	3220.9	3134.3	2288.6
22.5°	4795.4	4794.4	4759.3	4706.7	4662.9	4661.0	4538.2	4185.5	3538.5	3454.8	2491.2
25°	5439.3	5442.3	5374.1	5224.1	5114.9	4981.4	4840.2	4503.1	3878.6	3775.3	2704.6
27.5°	6177.9	6159.4	6056.1	5849.6	5633.3	5405.3	5201.6	4872.4	4239.1	4153.3	2949.2
30°	6841.4	6834.6	6713.8	6461.4	6176.9	5948.0	5652.7	5335.1	4705.8	4600.5	3222.9
32.5°	7459.1	7468.8	7301.2	7040.1	6765.4	6501.3	6189.5	5777.4	5163.7	5014.6	3521.0
35°	7941.3	7951.1	7777.6	7560.4	7277.8	7058.7	6761.4	6249.0	5615.8	5490.1	3863.9
37.5°	8198.6	8211.2	8110.9	7947.1	7770.8	7660.7	7384.0	6855.9	6165.2	6089.2	4269.3
40°	8247.3	8261.8	8218.1	8174.2	8164.4	8243.3	8162.5	7571.1	6927.1	6808.3	4873.3
42.5°	8101.1	8120.6	8140.1	8237.5	8436.3	8725.6	9007.2	8541.5	7908.2	7748.4	5611.8
45°	7717.2	7715.3	7792.3	8044.6	8489.8	9107.5	9889.8	9756.4	9244.9	9054.9	6655.3
47.5°	7060.5	7050.8	7217.5	7576.9	8270.6	9177.7	10609.9	11231.4	10950.9	10775.5	7776.7
50°	6060.0	6107.7	6369.8	6871.5	7726.0	8965.3	10832.0	12198.9	12350.9	12164.8	8682.8
52.5°	4888.0	4886.0	5297.2	5978.1	6919.3	8497.7	10677.1	12374.3	12805.9	12663.6	9129.0
55°	3617.5	3642.8	4070.5	4757.4	5872.0	7644.2	10171.4	12194.1	12979.3	12878.9	9423.2
57°	2690.9	2735.8	3078.7	3805.5	4960.1	6799.5	9498.2	11871.5	13047.5	12992.9	9667.8
57.5°	2511.7	2513.7	2847.8	3508.4	4693.1	6475.0	9305.3	11737.1	13045.6	13015.3	9707.7
60°	1546.2	1594.9	1825.8	2371.4	3435.3	5053.6	8012.4	10964.5	12944.2	12988.1	9878.2
62.5°	925.6	946.0	1096.0	1429.3	2214.6	3688.6	6556.8	9975.6	12680.2	12813.7	9866.5
65°	595.3	600.2	668.4	865.1	1384.4	2493.2	5052.6	8669.1	11997.2	12242.8	9480.6
67.5°	459.9	467.7	494.9	568.0	802.8	1553.0	3573.6	7274.9	10892.4	11209.0	8545.3
70°	408.3	412.1	421.9	445.2	531.0	876.9	2223.3	5682.9	9032.5	9122.2	6687.4
72.5°	333.2	343.9	374.1	381.9	420.9	547.6	1237.3	3814.3	6068.8	6091.2	3741.3
75°	258.2	260.1	305.0	327.4	354.6	377.0	552.4	1923.2	2915.0	2759.1	1441.9
77.5°	192.9	201.7	222.1	250.4	289.4	269.9	247.4	724.8	905.1	888.5	418.9
80°	123.7	128.6	154.9	188.0	225.0	176.3	139.3	212.4	198.7	204.6	100.4
82.5°	62.3	63.3	99.4	153.0	143.2	88.6	87.7	86.7	74.1	73.1	46.7
85°	6.8	14.6	64.3	87.7	64.3	29.2	41.0	39.9	39.0	39.9	27.2
87.5°	0.9	0.9	10.7	12.7	8.8	9.7	11.7	12.7	15.6	14.6	11.7
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°	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8	1181.8
2.5°	1216.9	1177.9	1105.8	1036.6	985.0	951.9	909.0	893.4	871.0	868.1	857.4
5°	1269.5	1195.4	1069.7	970.4	890.5	830.1	777.4	733.6	698.6	690.8	694.7
7.5°	1344.5	1234.4	1059.0	923.6	812.5	709.2	625.5	573.9	536.8	523.2	525.2
10°	1429.3	1286.1	1057.1	873.9	704.4	577.8	486.2	440.4	418.9	411.2	402.4
12.5°	1529.6	1345.5	1052.2	796.9	585.5	460.8	395.6	368.2	347.8	341.9	341.9
15°	1642.7	1408.8	1028.9	701.5	475.4	380.9	337.1	315.6	308.8	303.0	303.0
17.5°	1760.5	1471.2	980.2	583.6	394.6	326.4	299.1	286.4	276.7	269.9	269.9
20°	1894.9	1532.6	902.2	479.4	333.2	291.3	269.9	255.3	247.4	241.6	239.7
22.5°	2022.6	1582.2	802.8	393.6	290.3	262.1	242.6	227.0	219.2	216.3	216.3
25°	2155.1	1612.4	682.9	325.4	265.0	237.7	216.3	203.7	196.8	194.9	193.9
27.5°	2283.7	1630.0	577.8	284.5	241.6	215.3	194.9	185.1	178.3	176.3	177.3
30°	2439.6	1632.9	475.4	255.3	221.2	193.9	175.4	166.6	162.7	160.7	159.8
32.5°	2597.4	1629.0	399.5	237.7	201.7	175.4	159.8	153.0	150.0	147.1	147.1
35°	2774.7	1608.5	340.1	220.2	183.1	159.8	146.1	140.3	136.4	133.5	132.5
37.5°	2994.9	1597.8	305.9	200.7	166.6	145.2	132.5	126.7	123.7	119.8	118.9
40°	3341.8	1645.6	295.2	183.1	150.0	131.5	119.8	113.0	109.2	105.2	104.2
42.5°	3774.4	1729.3	277.7	165.6	135.5	118.9	107.2	99.4	92.6	87.7	85.7
45°	4334.5	1839.4	250.4	147.1	122.8	105.2	94.5	84.8	76.0	72.1	71.1
47.5°	4922.0	1945.6	226.1	132.5	109.2	93.6	81.8	71.1	63.3	60.4	59.4
50°	5282.5	1967.1	210.5	116.0	95.4	80.9	69.1	59.4	54.6	51.6	51.6
52.5°	5447.2	1933.0	189.0	101.3	82.8	71.1	59.4	51.6	48.7	46.7	45.8
55°	5562.1	1880.4	160.7	87.7	71.1	60.4	52.6	46.7	42.8	41.0	39.9
57°	5629.4	1809.2	139.3	77.0	61.4	52.6	46.7	41.9	38.0	34.1	34.1
57.5°	5632.3	1782.0	133.5	76.0	58.5	50.7	45.8	41.0	36.0	32.2	31.2
60°	5545.6	1594.9	107.2	64.3	46.7	42.8	38.0	32.2	25.4	21.5	20.4
62.5°	5266.9	1357.2	88.6	54.6	38.0	33.1	27.2	24.4	17.5	12.7	12.7
65°	4845.0	1100.9	76.0	43.8	31.2	24.4	18.5	17.5	10.7	5.9	4.9
67.5°	4235.2	857.4	64.3	36.0	26.3	17.5	12.7	11.7	5.9	2.0	0.0
70°	3226.8	584.6	53.6	29.2	19.5	12.7	8.8	6.8	3.9	0.9	0.0
72.5°	1859.9	321.5	44.8	22.4	14.6	9.7	6.8	3.9	3.9	0.0	0.0
75°	664.5	138.4	34.1	16.6	11.7	7.8	4.9	2.0	2.9	0.9	0.0
77.5°	211.4	74.1	22.4	12.7	9.7	5.9	3.9	2.0	2.0	0.9	0.0
80°	62.3	39.0	13.6	10.7	6.8	4.9	2.9	0.9	2.0	0.9	0.0
82.5°	34.1	19.5	10.7	7.8	6.8	3.9	2.9	0.9	0.9	0.9	0.0
85°	17.5	11.7	8.8	7.8	6.8	3.9	2.9	0.9	0.0	0.9	0.9
87.5°	9.7	8.8	8.8	7.8	6.8	4.9	2.9	0.9	0.0	0.0	0.0
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)