

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: P651842

Luminaire Tested: **GALN-SA4A-840-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4A-840-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12514.9 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

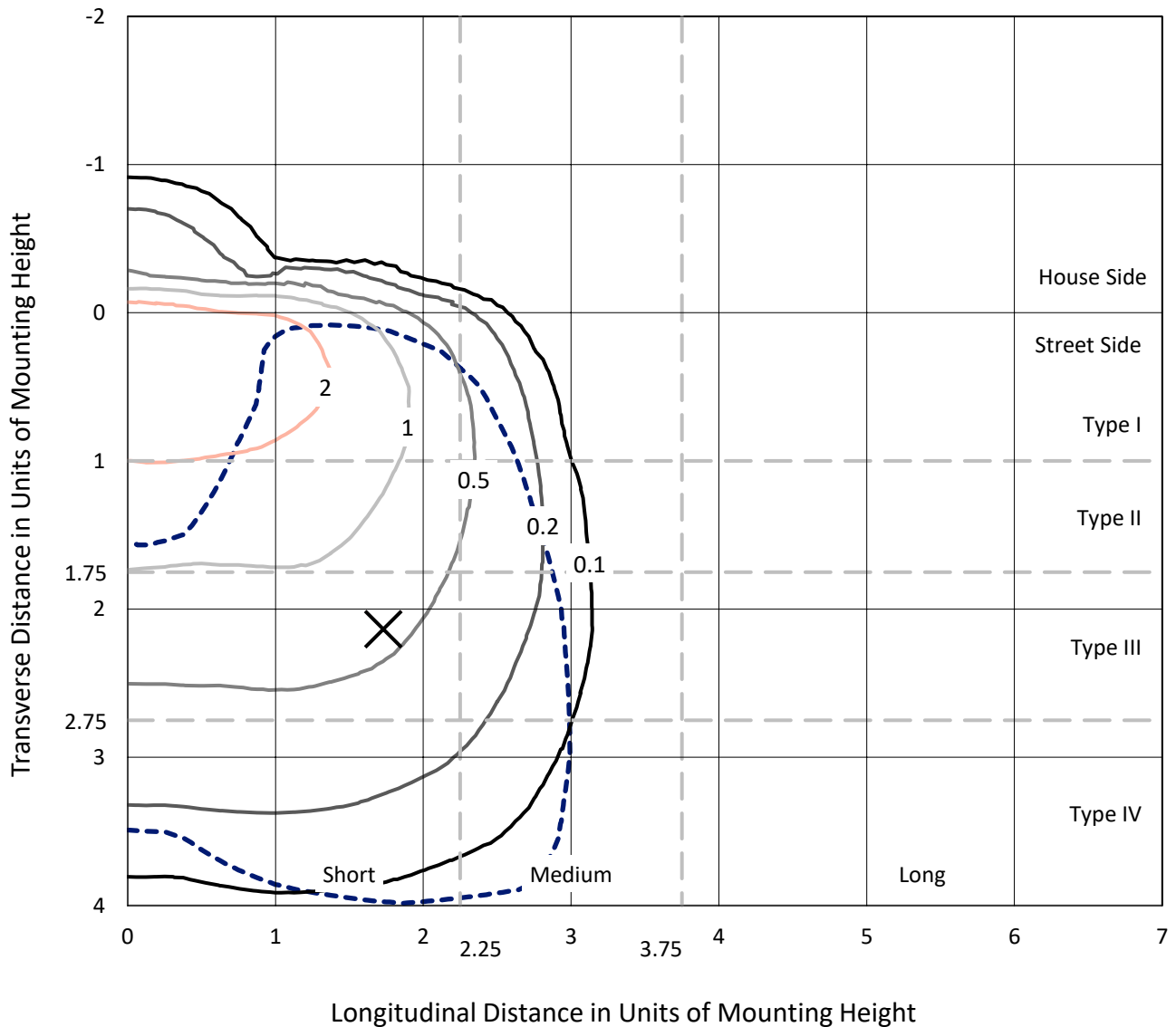
Input Watts (W): 121
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

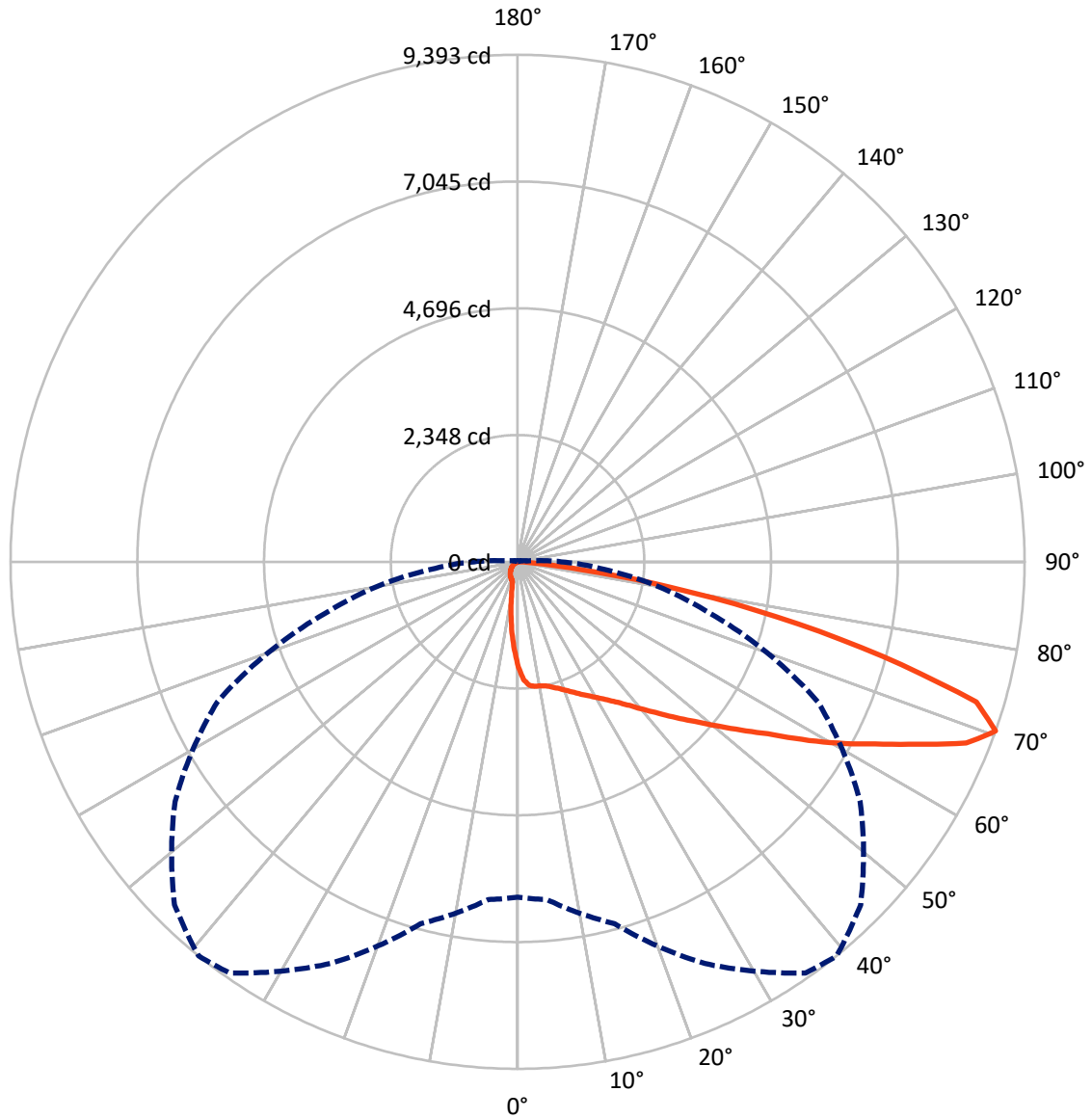
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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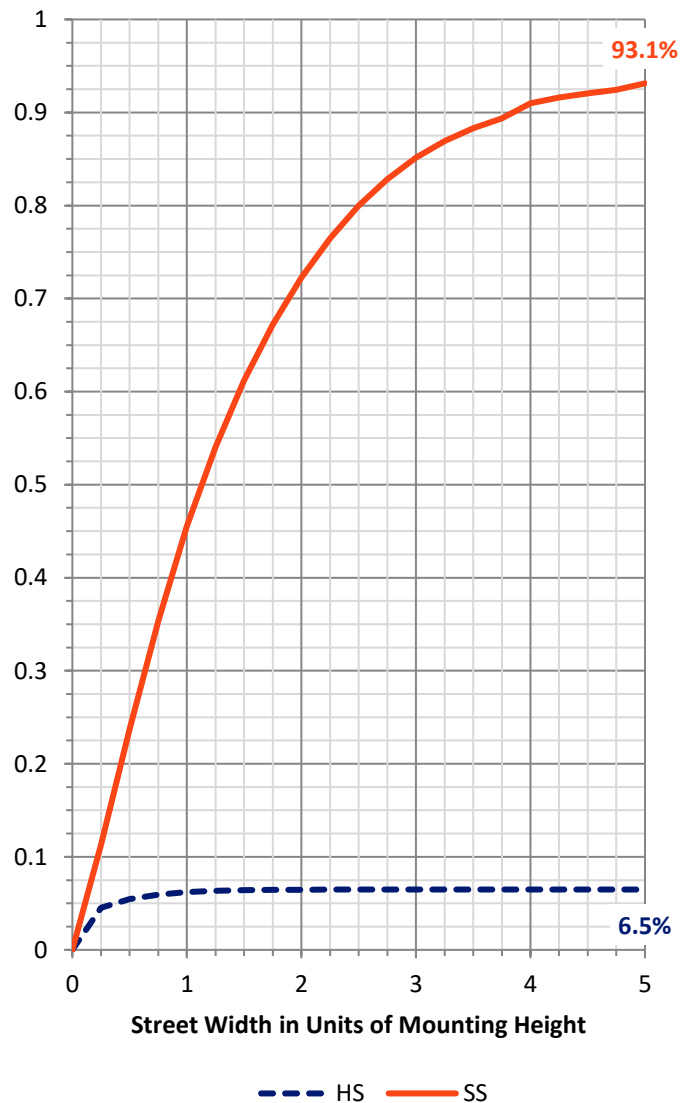
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	816.0	0.0	816.0
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	11698.9	0.0	11698.9
	% Fixture	93.5	0.0	93.5
Total	Lumens	12514.9	0.0	12514.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.6	1.3
10°-20°	432.8	3.5
20°-30°	725.1	5.8
30°-40°	1124.6	9.0
40°-50°	1782.1	14.2
50°-60°	2612.3	20.9
60°-70°	3348.3	26.8
70°-80°	2104.0	16.8
80°-90°	219.2	1.8
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°	12514.9	100.0
0°-180°	12514.9	100.0

Coefficient of Utilization



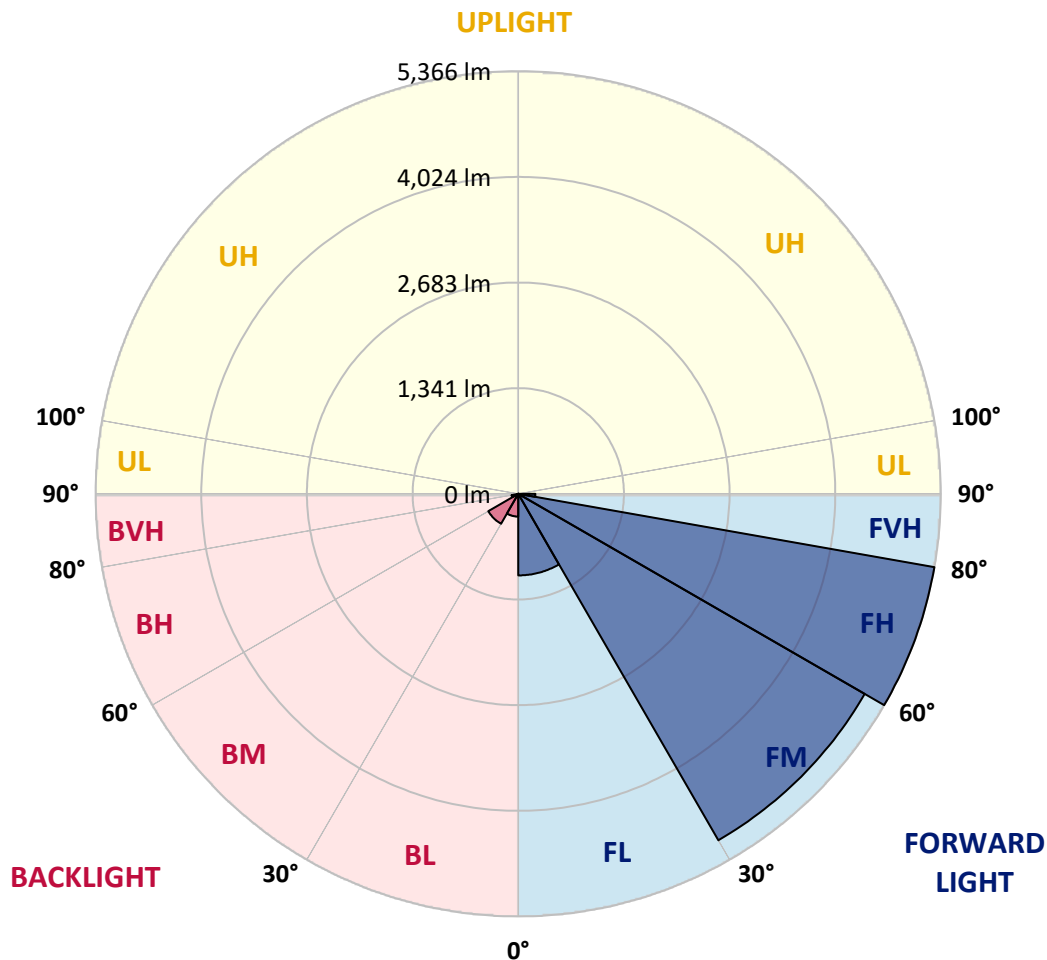
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1035.5	8.3			
FM (30°-60°)	5079.8	40.6			
FH (60°-80°)	5366.0	42.9			G3/7500
FVH (80°-90°)	217.6	1.7			G2/225
BL (0°-30°)	289.0	2.3	B1/500		
BM (30°-60°)	439.2	3.5	B1/1000		
BH (60°-80°)	86.3	0.7	B0/110		G0/110
BVH (80°-90°)	1.6	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7
2.5°	2256.3	2248.7	2238.7	2226.9	2193.2	2187.4	2167.2	2124.3	2073.0	2030.9	1972.9
5°	2363.1	2367.3	2359.8	2338.7	2314.3	2300.1	2274.8	2208.4	2141.9	2057.0	1962.0
7.5°	2387.5	2395.9	2386.7	2366.5	2342.9	2327.8	2307.6	2250.4	2173.1	2076.3	1946.0
10°	2385.0	2395.1	2389.2	2370.7	2351.4	2337.1	2315.2	2269.8	2207.5	2105.8	1951.0
12.5°	2380.8	2394.2	2393.4	2384.2	2368.2	2357.2	2343.8	2303.4	2245.4	2148.7	1978.8
15°	2369.0	2385.8	2401.0	2408.5	2409.4	2409.4	2392.6	2349.7	2294.2	2205.0	2015.0
17.5°	2374.1	2393.4	2431.2	2453.1	2468.3	2466.6	2448.9	2402.7	2341.3	2263.0	2052.8
20°	2405.2	2431.2	2484.2	2528.0	2543.1	2538.1	2514.5	2460.7	2390.9	2312.7	2089.8
22.5°	2481.7	2505.3	2571.7	2623.0	2633.9	2620.5	2586.8	2513.7	2450.6	2366.5	2134.4
25°	2596.1	2623.8	2685.2	2723.9	2723.9	2716.3	2669.2	2583.5	2517.9	2441.3	2192.4
27.5°	2734.8	2758.4	2818.9	2853.4	2833.2	2811.4	2764.3	2660.8	2597.8	2535.5	2262.2
30°	2875.3	2890.4	2954.3	2969.5	2948.5	2920.7	2870.2	2766.8	2711.3	2663.4	2363.1
32.5°	3008.2	3041.0	3094.0	3090.6	3062.0	3048.5	3002.3	2892.1	2861.0	2856.0	2504.4
35°	3141.1	3166.3	3213.4	3225.2	3199.9	3197.4	3163.8	3082.2	3083.0	3115.8	2724.8
37.5°	3255.4	3278.1	3333.6	3359.7	3364.8	3377.4	3363.9	3310.1	3386.6	3476.6	3016.6
40°	3351.3	3383.3	3453.9	3499.3	3551.5	3597.7	3600.2	3612.0	3765.9	3920.7	3397.6
42.5°	3426.1	3470.7	3573.3	3657.4	3776.8	3835.7	3882.8	3947.6	4206.6	4437.9	3846.6
45°	3523.7	3575.0	3702.8	3834.9	4021.6	4118.3	4183.9	4357.1	4724.7	5040.0	4307.5
47.5°	3685.2	3712.1	3842.4	4035.0	4280.6	4418.5	4546.4	4808.8	5280.6	5563.0	4691.0
50°	3892.9	3910.6	4009.0	4276.4	4594.3	4776.0	5008.9	5317.6	5857.4	5997.0	4908.0
52.5°	4122.5	4128.4	4202.4	4542.2	4945.8	5174.6	5435.3	5816.2	6327.5	6306.5	5051.8
55°	4389.1	4380.7	4443.8	4830.6	5362.1	5623.6	5927.2	6326.7	6735.4	6526.0	5134.2
57.5°	4694.4	4671.7	4733.1	5213.3	5895.2	6208.1	6516.7	6767.4	7051.6	6710.2	5173.7
60°	5014.0	4968.5	5041.7	5642.9	6523.5	6820.3	7076.8	7144.1	7384.7	6856.5	5105.6
62.5°	5268.8	5269.6	5405.9	6100.4	7169.4	7429.2	7565.5	7626.0	7671.4	6824.5	4747.4
65°	5666.5	5679.9	5897.8	6735.4	7917.0	8142.4	8235.7	8039.0	7684.0	6427.6	4209.1
67.5°	6076.9	6119.8	6518.4	7610.0	8780.7	8962.4	8842.1	8118.8	7340.9	5521.8	3191.5
70°	6210.6	6281.3	6938.1	8212.2	9298.7	9392.9	8985.9	7746.3	6136.6	3691.9	1606.3
72.5°	5690.9	5805.3	6696.7	7992.7	8968.3	8886.7	8039.8	6496.6	3901.3	1401.9	490.3
75°	4013.2	4063.6	5565.6	6630.3	7213.1	6981.8	6115.6	4188.1	1604.6	393.6	168.2
77.5°	2072.1	2047.8	3310.1	4399.2	5144.3	4904.6	4004.8	2168.0	608.0	164.0	104.3
80°	1071.4	1089.1	1432.2	2305.1	3140.2	2889.6	2135.2	1005.0	323.8	90.8	79.9
82.5°	600.5	563.5	823.3	1006.7	1468.4	1151.3	819.1	711.5	141.3	54.7	75.7
85°	109.3	114.4	451.6	544.1	509.6	323.8	264.1	475.2	41.2	30.3	53.0
87.5°	1.7	1.7	87.5	156.4	99.2	45.4	83.3	68.1	8.4	11.8	9.3
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°	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7	1952.7
2.5°	1943.5	1911.5	1851.8	1793.0	1718.2	1656.8	1615.6	1572.7	1528.9	1532.3	1542.4
5°	1909.8	1854.3	1736.7	1612.2	1492.8	1385.1	1279.2	1184.1	1145.4	1110.1	1111.8
7.5°	1876.2	1798.1	1625.7	1430.5	1249.7	1066.4	933.5	824.2	766.2	722.4	709.8
10°	1861.0	1757.7	1523.9	1255.6	999.1	798.9	628.2	539.1	470.1	448.3	454.1
12.5°	1867.8	1737.5	1432.2	1097.5	792.2	556.7	437.3	391.9	376.8	374.2	372.6
15°	1880.4	1723.2	1342.2	922.6	582.0	413.8	367.5	359.1	357.4	355.7	356.6
17.5°	1897.2	1710.6	1246.4	758.6	446.6	361.6	348.2	344.0	343.1	343.1	343.1
20°	1914.0	1696.3	1139.6	612.2	372.6	341.4	333.0	330.5	329.7	329.7	328.8
22.5°	1933.4	1683.7	1031.1	481.1	343.1	327.1	319.6	317.9	317.1	316.2	316.2
25°	1961.1	1667.7	915.8	393.6	324.6	313.7	306.1	304.4	303.6	300.2	301.1
27.5°	1998.1	1655.9	797.3	339.8	307.8	296.9	291.8	289.3	287.6	285.1	285.9
30°	2048.6	1645.8	671.1	310.3	288.5	279.2	274.2	272.5	270.8	268.3	268.3
32.5°	2136.1	1650.0	538.2	286.8	270.8	259.9	254.8	253.1	251.5	248.9	248.9
35°	2267.3	1674.4	430.6	266.6	249.8	238.8	233.8	233.8	231.3	227.9	227.1
37.5°	2481.7	1736.7	345.7	247.3	229.6	219.5	213.6	211.9	209.4	204.4	203.5
40°	2734.8	1833.3	291.0	227.9	211.1	201.0	196.0	190.9	184.2	179.1	178.3
42.5°	3052.7	1932.5	252.3	208.6	193.4	184.2	178.3	169.9	159.8	153.1	152.2
45°	3384.1	2023.4	226.2	190.9	176.6	169.0	162.3	148.9	136.2	127.8	127.0
47.5°	3631.4	2040.2	205.2	174.1	162.3	154.7	145.5	128.7	111.9	104.3	101.8
50°	3748.3	1958.6	183.3	157.3	148.0	139.6	127.8	108.5	90.0	80.7	79.1
52.5°	3789.5	1817.4	165.7	142.1	133.7	123.6	109.3	87.5	70.6	61.4	60.6
55°	3772.6	1639.1	149.7	127.8	116.9	105.1	90.8	69.8	52.1	44.6	42.9
57.5°	3684.3	1412.0	133.7	113.5	100.1	88.3	72.3	52.1	35.3	28.6	27.8
60°	3446.3	1102.6	117.7	97.6	84.9	72.3	57.2	37.0	21.9	16.0	16.0
62.5°	3044.3	818.3	102.6	81.6	71.5	58.0	40.4	23.5	11.8	8.4	7.6
65°	2543.9	603.8	85.8	69.0	59.7	45.4	28.6	14.3	5.9	2.5	1.7
67.5°	1775.4	372.6	71.5	56.3	48.8	32.8	17.7	5.9	2.5	0.0	0.0
70°	806.5	177.5	54.7	42.9	37.0	23.5	9.3	3.4	1.7	0.0	0.0
72.5°	250.6	93.4	38.7	31.1	25.2	15.1	5.0	2.5	1.7	0.0	0.0
75°	116.1	59.7	24.4	16.8	14.3	7.6	3.4	1.7	0.8	0.0	0.0
77.5°	86.6	46.3	14.3	9.3	7.6	5.0	2.5	1.7	0.8	0.0	0.0
80°	75.7	23.5	8.4	5.9	4.2	3.4	1.7	0.8	0.0	0.0	0.0
82.5°	68.1	11.8	5.0	3.4	2.5	1.7	0.8	0.8	0.0	0.0	0.0
85°	37.0	6.7	3.4	2.5	1.7	0.8	0.8	0.0	0.0	0.0	0.0
87.5°	6.7	3.4	2.5	1.7	1.7	0.8	0.8	0.8	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)