

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: P454086

Luminaire Tested: **GALN-SA5A-830-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454086
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-SA5A-830-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 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: 14970 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

Input Watts (W): 154
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

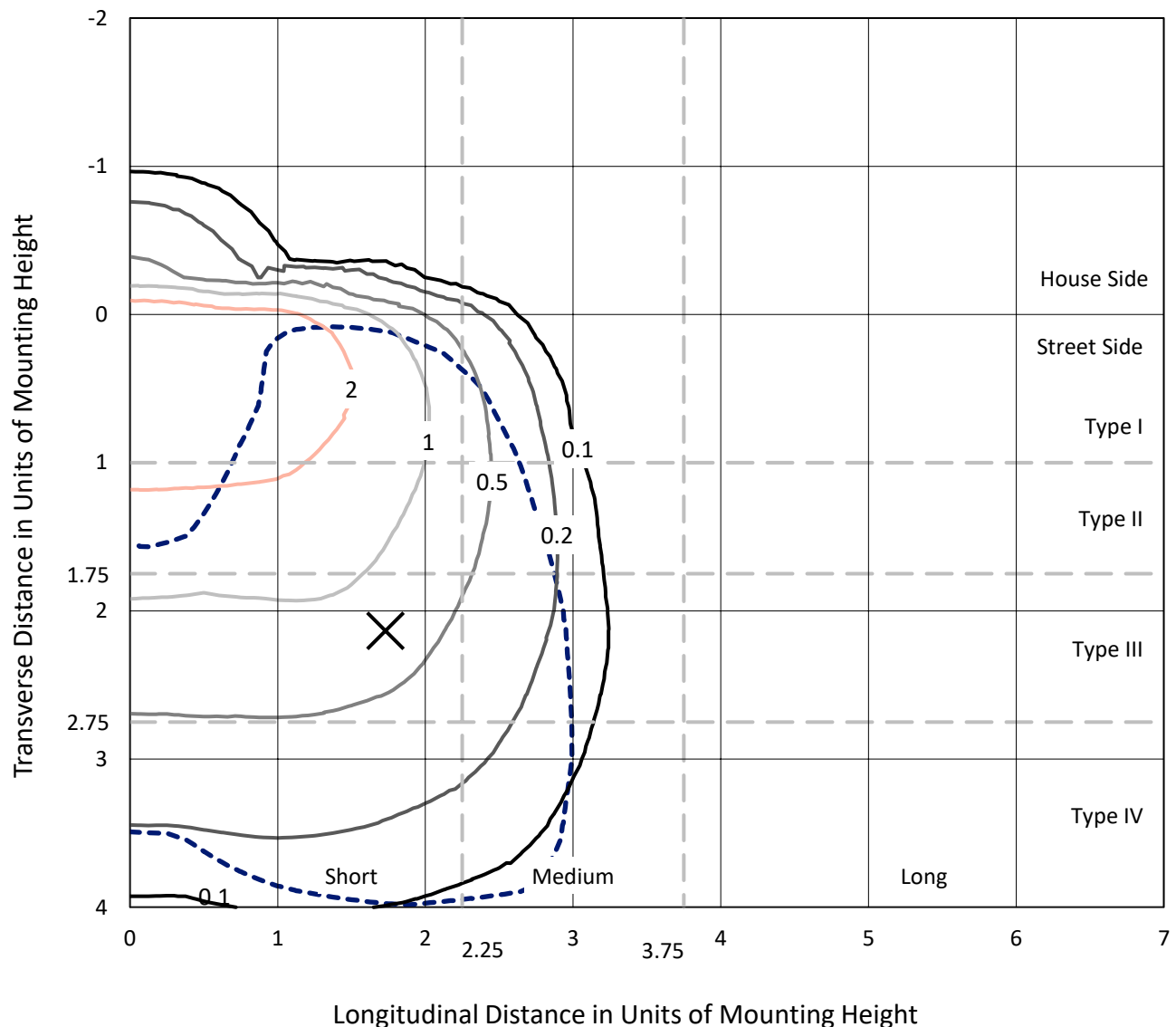


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Iso-Footcandle Lines of Horizontal Illumination

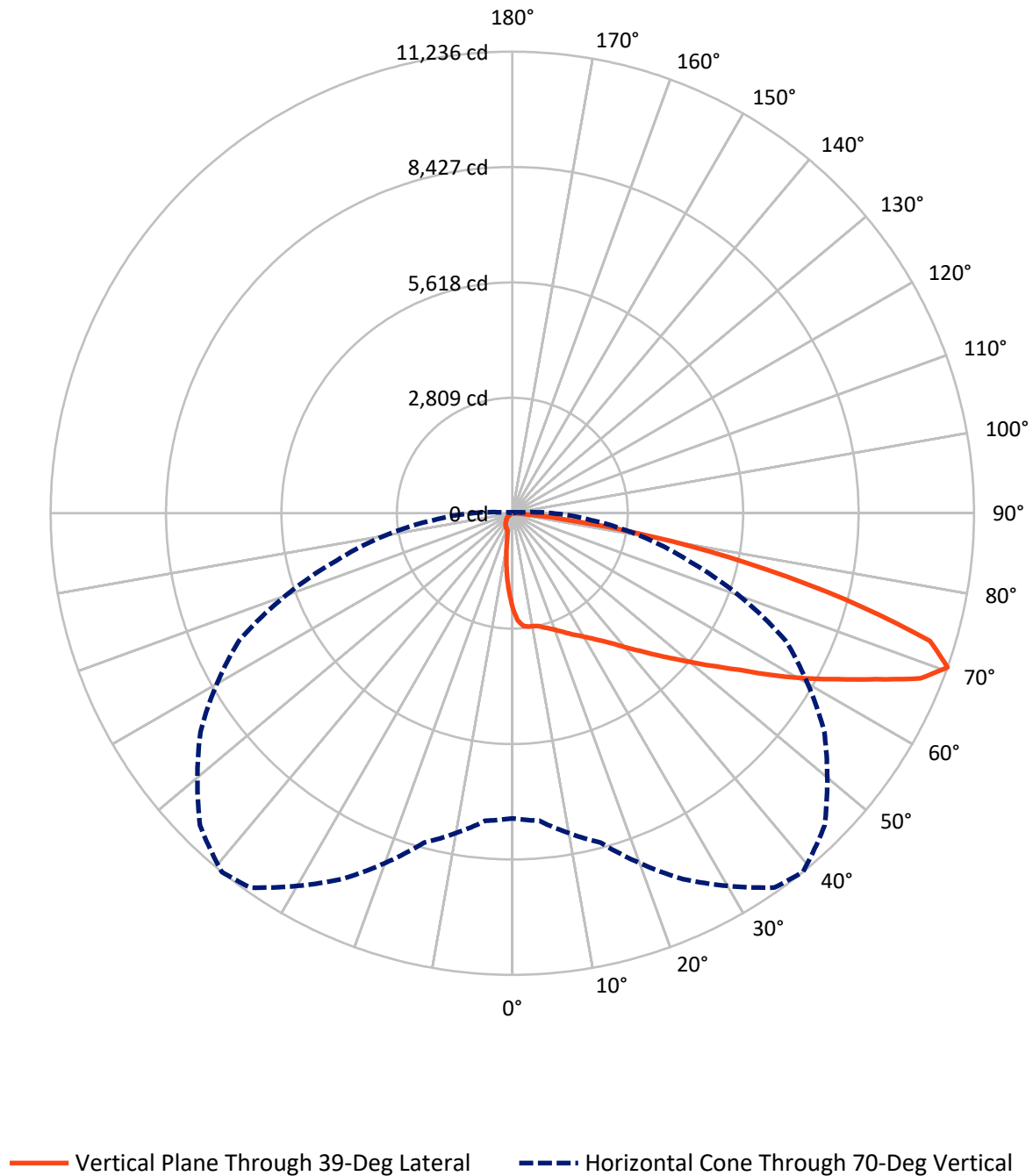
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	976.1	0.0	976.1
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	13993.9	0.0	13993.9
	% Fixture	93.5	0.0	93.5
Total	Lumens	14970.0	0.0	14970.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.2	1.3
10°-20°	517.7	3.5
20°-30°	867.4	5.8
30°-40°	1345.2	9.0
40°-50°	2131.7	14.2
50°-60°	3124.7	20.9
60°-70°	4005.2	26.8
70°-80°	2516.7	16.8
80°-90°	262.2	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°	14970.0	100.0
0°-180°	14970.0	100.0

Coefficient of Utilization



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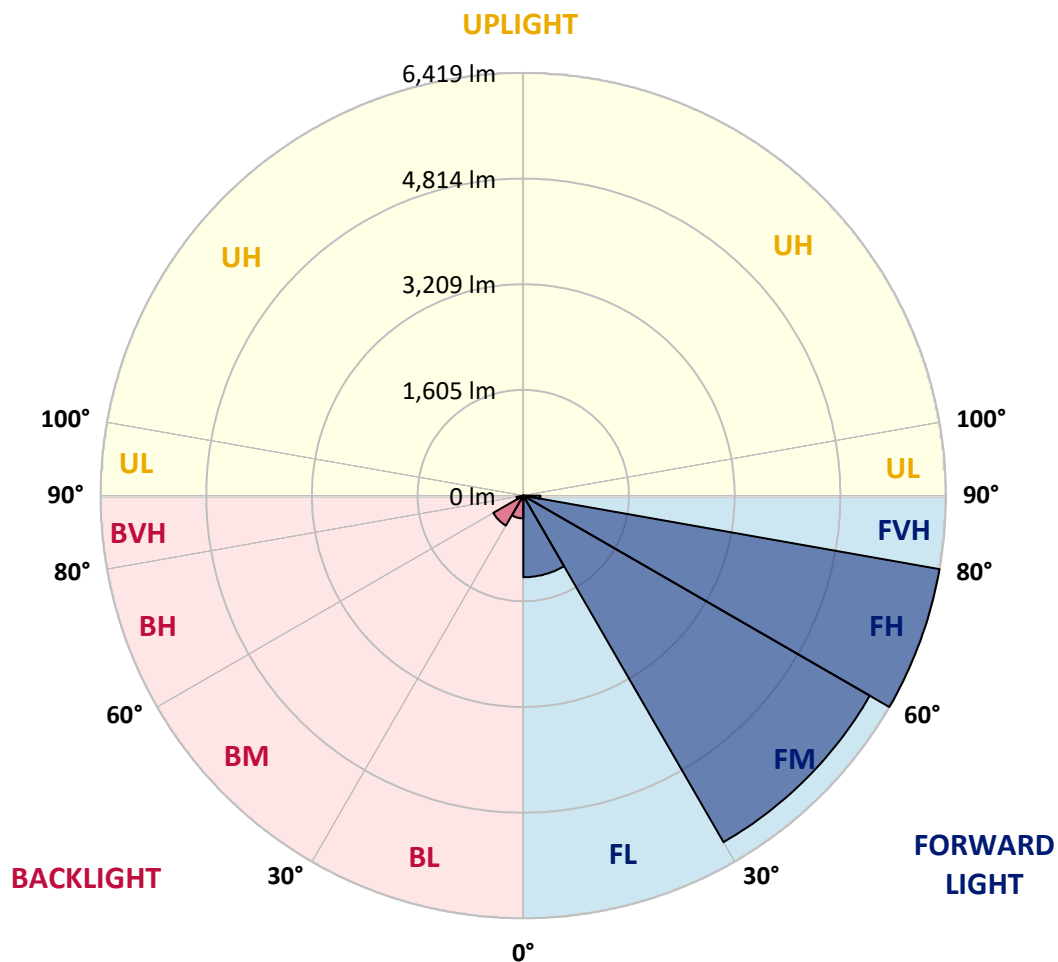
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1238.7	8.3			
FM	(30°-60°)	6076.3	40.6			
FH	(60°-80°)	6418.6	42.9			G3/7500
FVH	(80°-90°)	260.3	1.7			G3/500
BL	(0°-30°)	345.6	2.3	B1/500		
BM	(30°-60°)	525.3	3.5	B1/1000		
BH	(60°-80°)	103.2	0.7	B0/110		G0/110
BVH	(80°-90°)	1.9	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°	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8
2.5°	2699.0	2689.9	2677.9	2663.8	2623.5	2616.5	2592.4	2541.0	2479.7	2429.4	2360.0
5°	2826.7	2831.8	2822.7	2797.6	2768.4	2751.3	2721.1	2641.6	2562.2	2460.6	2346.9
7.5°	2855.9	2866.0	2854.9	2830.8	2802.6	2784.5	2760.3	2691.9	2599.4	2483.7	2327.8
10°	2852.9	2865.0	2857.9	2835.8	2812.7	2795.6	2769.4	2715.1	2640.6	2518.9	2333.8
12.5°	2847.9	2864.0	2863.0	2851.9	2832.8	2819.7	2803.6	2755.3	2685.9	2570.2	2367.0
15°	2833.8	2853.9	2872.0	2881.1	2882.1	2882.1	2861.9	2810.6	2744.3	2637.6	2410.3
17.5°	2839.8	2863.0	2908.2	2934.4	2952.5	2950.5	2929.3	2874.0	2800.6	2707.0	2455.5
20°	2877.0	2908.2	2971.6	3023.9	3042.0	3036.0	3007.8	2943.4	2859.9	2766.4	2499.8
22.5°	2968.6	2996.7	3076.2	3137.6	3150.7	3134.6	3094.3	3006.8	2931.4	2830.8	2553.1
25°	3105.4	3138.6	3212.0	3258.3	3258.3	3249.2	3192.9	3090.3	3011.8	2920.3	2622.5
27.5°	3271.4	3299.5	3372.0	3413.2	3389.1	3362.9	3306.6	3182.8	3107.4	3033.0	2706.0
30°	3439.4	3457.5	3533.9	3552.0	3526.9	3493.7	3433.3	3309.6	3243.2	3185.9	2826.7
32.5°	3598.3	3637.5	3700.9	3696.9	3662.7	3646.6	3591.3	3459.5	3422.3	3416.2	2995.7
35°	3757.3	3787.4	3843.8	3857.8	3827.7	3824.7	3784.4	3686.8	3687.8	3727.1	3259.3
37.5°	3894.1	3921.2	3987.6	4018.8	4024.8	4039.9	4023.8	3959.4	4051.0	4158.6	3608.4
40°	4008.7	4047.0	4131.5	4185.8	4248.2	4303.5	4306.5	4320.6	4504.7	4689.8	4064.1
42.5°	4098.3	4151.6	4274.3	4374.9	4517.8	4588.2	4644.5	4722.0	5031.8	5308.4	4601.2
45°	4215.0	4276.3	4429.2	4587.2	4810.5	4926.2	5004.6	5211.9	5651.5	6028.7	5152.5
47.5°	4408.1	4440.3	4596.2	4826.6	5120.3	5285.3	5438.2	5752.1	6316.4	6654.4	5611.2
50°	4656.6	4677.7	4795.4	5115.3	5495.5	5712.8	5991.5	6360.7	7006.5	7173.5	5870.8
52.5°	4931.2	4938.2	5026.8	5433.2	5916.0	6189.7	6501.5	6957.2	7568.8	7543.7	6042.8
55°	5250.1	5240.0	5315.5	5778.2	6414.0	6726.8	7090.0	7567.8	8056.7	7806.2	6141.4
57.5°	5615.3	5588.1	5661.5	6235.9	7051.8	7426.0	7795.2	8094.9	8435.0	8026.5	6188.7
60°	5997.5	5943.2	6030.7	6750.0	7803.2	8158.3	8465.1	8545.6	8833.3	8201.6	6107.2
62.5°	6302.3	6303.3	6466.3	7297.2	8575.8	8886.6	9049.6	9122.0	9176.3	8163.3	5678.6
65°	6778.1	6794.2	7054.8	8056.7	9470.1	9739.7	9851.3	9615.9	9191.4	7688.5	5034.8
67.5°	7269.0	7320.4	7797.2	9102.9	10503.2	10720.5	10576.6	9711.5	8781.0	6605.1	3817.6
70°	7429.0	7513.5	8299.1	9823.2	11122.9	11235.5	10748.7	9265.9	7340.5	4416.2	1921.4
72.5°	6807.3	6944.1	8010.4	9560.6	10727.5	10630.0	9617.0	7771.0	4666.6	1676.9	586.5
75°	4800.4	4860.8	6657.4	7931.0	8628.1	8351.5	7315.3	5009.7	1919.4	470.8	201.2
77.5°	2478.7	2449.5	3959.4	5262.2	6153.4	5866.7	4790.4	2593.4	727.3	196.2	124.7
80°	1281.6	1302.7	1713.1	2757.3	3756.2	3456.5	2554.1	1202.1	387.3	108.6	95.6
82.5°	718.3	674.0	984.8	1204.1	1756.4	1377.2	979.8	851.0	169.0	65.4	90.5
85°	130.8	136.8	540.2	650.9	609.6	387.3	315.9	568.4	49.3	36.2	63.4
87.5°	2.0	2.0	104.6	187.1	118.7	54.3	99.6	81.5	10.1	14.1	11.1
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°	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8	2335.8
2.5°	2324.8	2286.5	2215.1	2144.7	2055.2	1981.7	1932.4	1881.1	1828.8	1832.9	1844.9
5°	2284.5	2218.1	2077.3	1928.4	1785.6	1656.8	1530.1	1416.4	1370.1	1327.9	1329.9
7.5°	2244.3	2150.7	1944.5	1711.1	1494.9	1275.6	1116.6	985.8	916.4	864.1	849.0
10°	2226.2	2102.5	1822.8	1501.9	1195.1	955.7	751.5	644.8	562.3	536.2	543.2
12.5°	2234.2	2078.3	1713.1	1312.8	947.6	665.9	523.1	468.8	450.7	447.7	445.6
15°	2249.3	2061.2	1605.5	1103.5	696.1	494.9	439.6	429.5	427.5	425.5	426.5
17.5°	2269.4	2046.1	1490.8	907.4	534.2	432.6	416.5	411.4	410.4	410.4	410.4
20°	2289.6	2029.0	1363.1	732.3	445.6	408.4	398.4	395.3	394.3	394.3	393.3
22.5°	2312.7	2013.9	1233.3	575.4	410.4	391.3	382.3	380.3	379.2	378.2	378.2
25°	2345.9	1994.8	1095.5	470.8	388.3	375.2	366.2	364.2	363.2	359.1	360.1
27.5°	2390.2	1980.7	953.6	406.4	368.2	355.1	349.1	346.0	344.0	341.0	342.0
30°	2450.5	1968.7	802.8	371.2	345.0	334.0	327.9	325.9	323.9	320.9	320.9
32.5°	2555.1	1973.7	643.8	343.0	323.9	310.8	304.8	302.8	300.8	297.8	297.8
35°	2712.1	2002.9	515.1	318.9	298.8	285.7	279.7	279.7	276.6	272.6	271.6
37.5°	2968.6	2077.3	413.4	295.8	274.6	262.6	255.5	253.5	250.5	244.4	243.4
40°	3271.4	2193.0	348.1	272.6	252.5	240.4	234.4	228.4	220.3	214.3	213.3
42.5°	3651.6	2311.7	301.8	249.5	231.4	220.3	213.3	203.2	191.1	183.1	182.1
45°	4048.0	2420.3	270.6	228.4	211.3	202.2	194.1	178.1	163.0	152.9	151.9
47.5°	4343.7	2440.5	245.5	208.2	194.1	185.1	174.0	153.9	133.8	124.7	121.7
50°	4483.6	2342.9	219.3	188.1	177.0	167.0	152.9	129.8	107.6	96.6	94.6
52.5°	4532.8	2173.9	198.2	170.0	159.9	147.9	130.8	104.6	84.5	73.4	72.4
55°	4512.7	1960.6	179.1	152.9	139.8	125.7	108.6	83.5	62.4	53.3	51.3
57.5°	4407.1	1689.0	159.9	135.8	119.7	105.6	86.5	62.4	42.3	34.2	33.2
60°	4122.4	1318.8	140.8	116.7	101.6	86.5	68.4	44.3	26.2	19.1	19.1
62.5°	3641.6	978.8	122.7	97.6	85.5	69.4	48.3	28.2	14.1	10.1	9.1
65°	3043.0	722.3	102.6	82.5	71.4	54.3	34.2	17.1	7.0	3.0	2.0
67.5°	2123.6	445.6	85.5	67.4	58.3	39.2	21.1	7.0	3.0	0.0	0.0
70°	964.7	212.3	65.4	51.3	44.3	28.2	11.1	4.0	2.0	0.0	0.0
72.5°	299.8	111.7	46.3	37.2	30.2	18.1	6.0	3.0	2.0	0.0	0.0
75°	138.8	71.4	29.2	20.1	17.1	9.1	4.0	2.0	1.0	0.0	0.0
77.5°	103.6	55.3	17.1	11.1	9.1	6.0	3.0	2.0	1.0	0.0	0.0
80°	90.5	28.2	10.1	7.0	5.0	4.0	2.0	1.0	0.0	0.0	0.0
82.5°	81.5	14.1	6.0	4.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0
85°	44.3	8.0	4.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0
87.5°	8.0	4.0	3.0	2.0	2.0	1.0	1.0	1.0	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)