

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638985

Luminaire Tested: GWS-SA4F-830-U-T2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638985
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-830-U-T2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20246.1 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G3

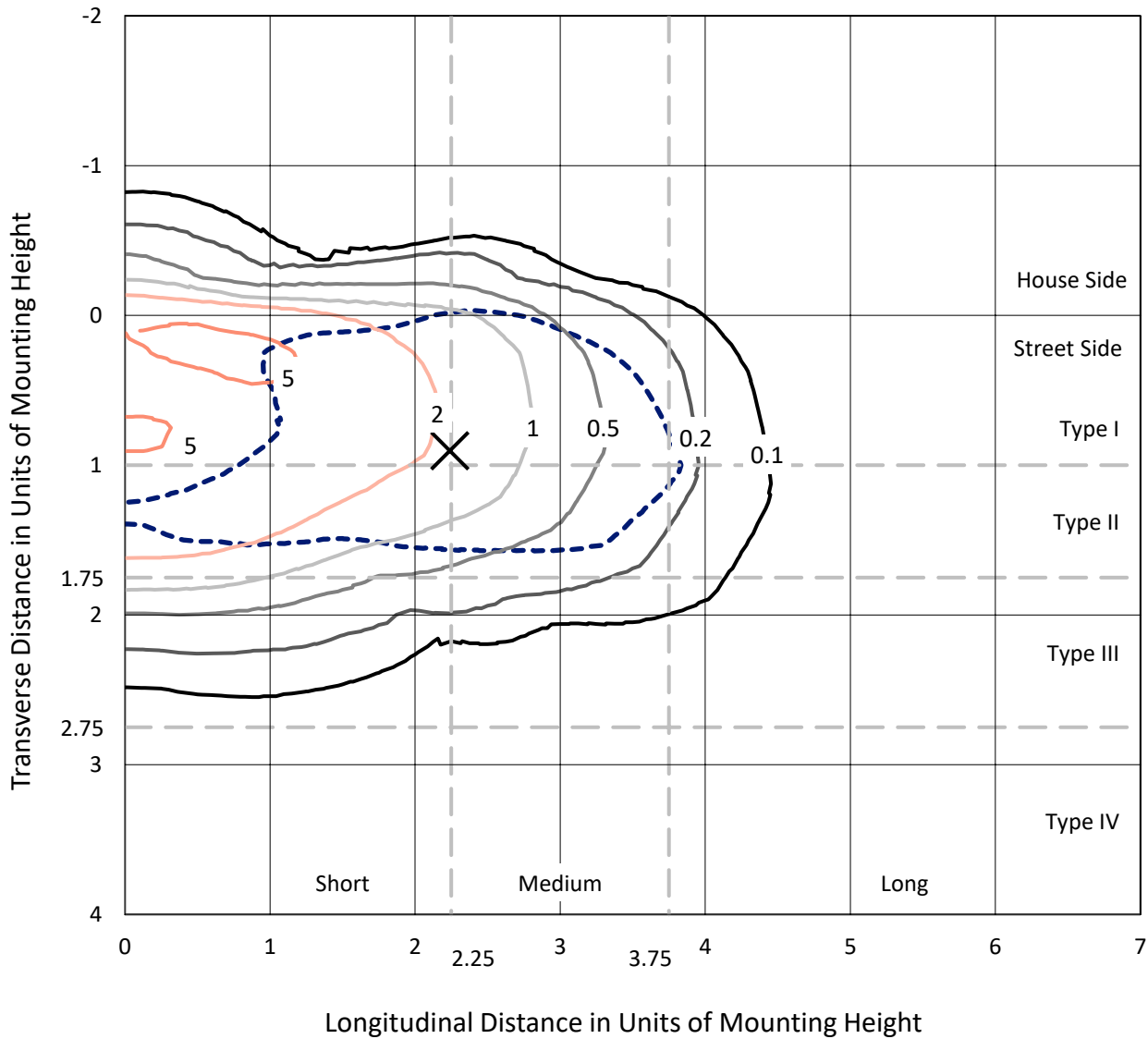
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

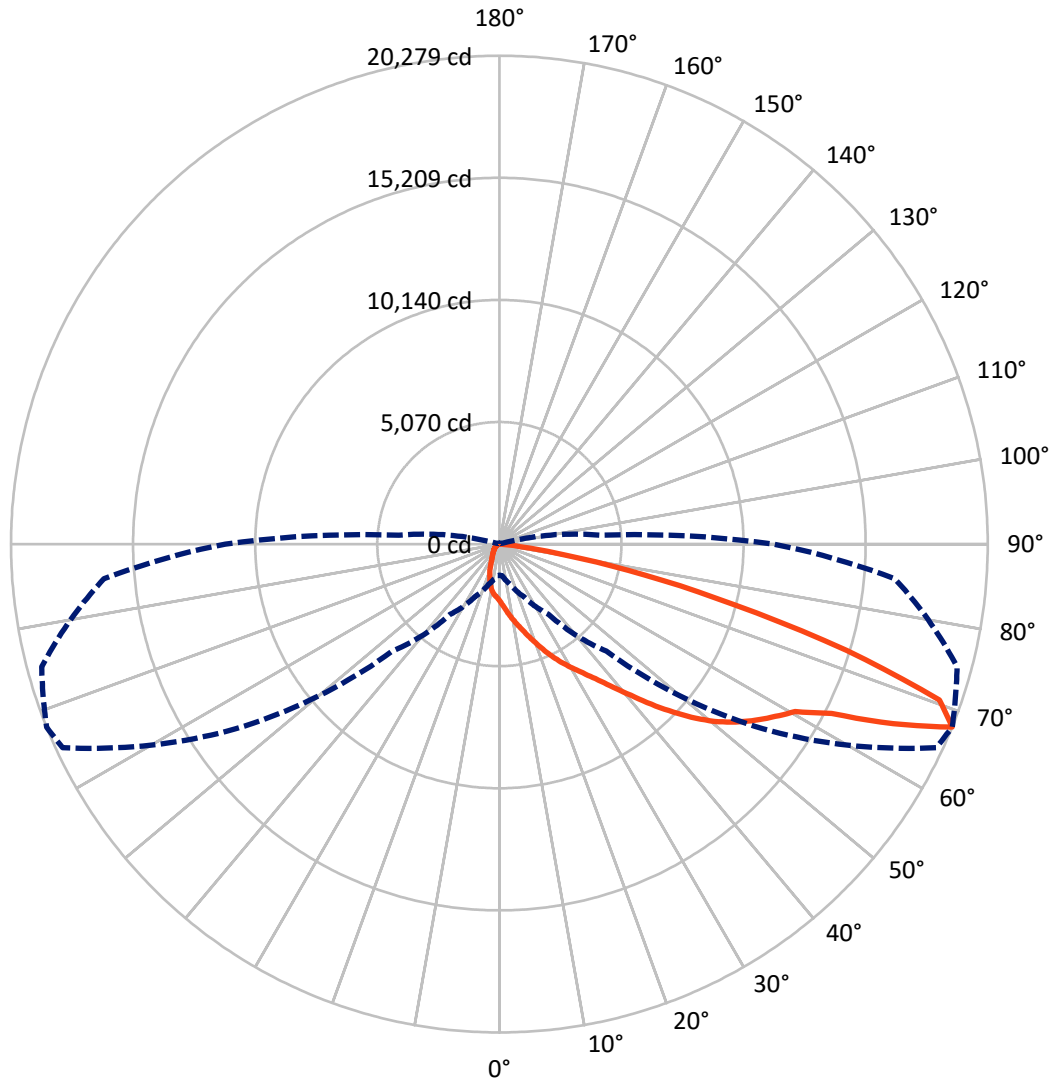
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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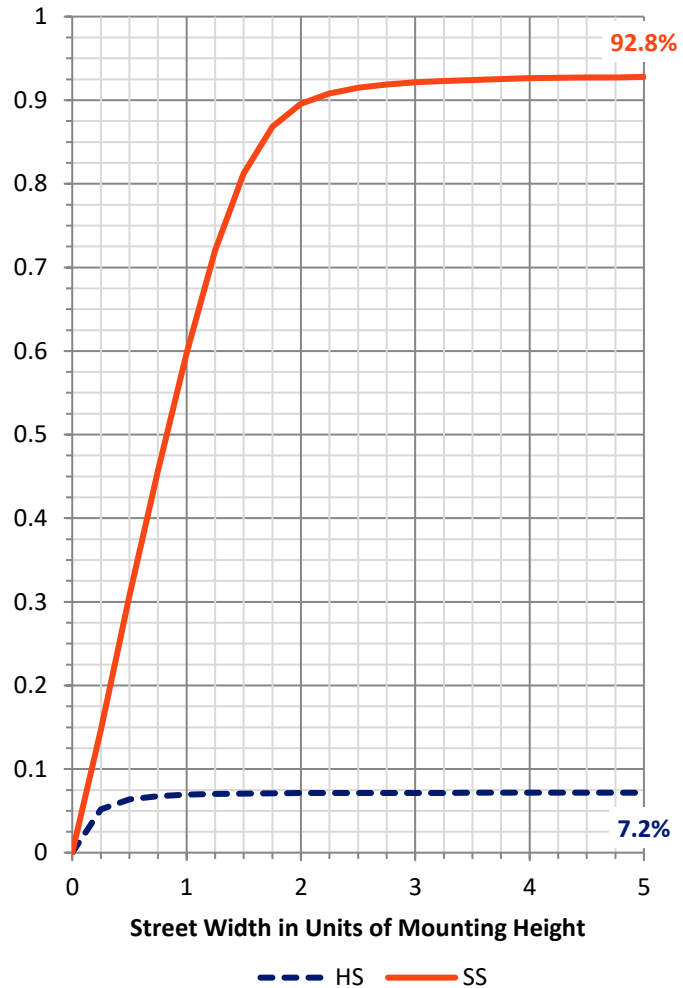
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1462.0	0.0	1462.0
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	18784.1	0.0	18784.1
	% Fixture	92.8	0.0	92.8
Total	Lumens	20246.1	0.0	20246.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.8	1.1
10°-20°	659.9	3.3
20°-30°	1134.0	5.6
30°-40°	1971.7	9.7
40°-50°	3440.4	17.0
50°-60°	5188.9	25.6
60°-70°	5203.2	25.7
70°-80°	2295.6	11.3
80°-90°	122.6	0.6
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°	20246.1	100.0
0°-180°	20246.1	100.0

Coefficient of Utilization



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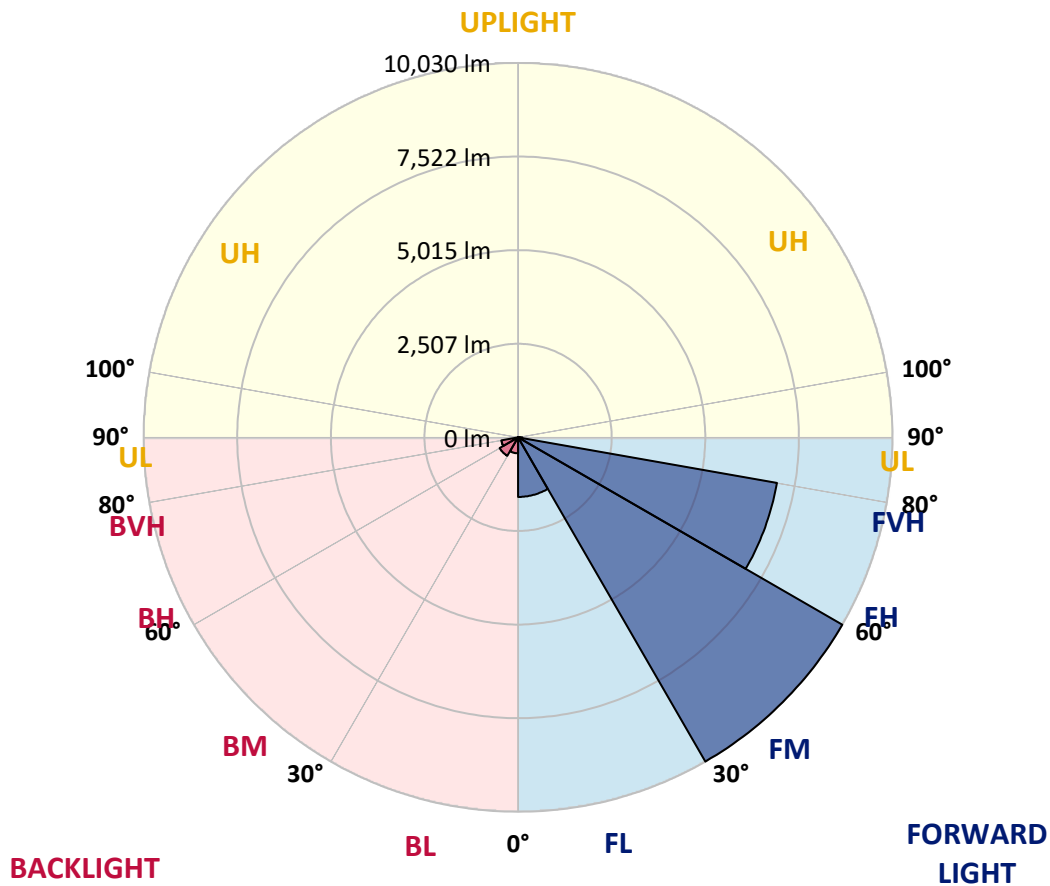
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1596.0	7.9			
FM (30°-60°)	10029.9	49.5			
FH (60°-80°)	7042.5	34.8			G3/7500
FVH (80°-90°)	115.7	0.6			G2/225
BL (0°-30°)	427.7	2.1	B1/500		
BM (30°-60°)	571.1	2.8	B1/1000		
BH (60°-80°)	456.3	2.3	B1/500		G1/500
BVH (80°-90°)	6.9	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1
2.5°	2743.7	2761.1	2743.7	2747.5	2697.2	2673.9	2623.5	2553.8	2536.3	2491.8	2423.9
5°	3078.9	3094.4	3076.9	3073.0	3014.9	2972.3	2889.0	2768.8	2734.0	2646.8	2513.1
7.5°	3261.0	3270.7	3276.5	3286.2	3264.9	3230.0	3154.4	3005.2	2968.4	2827.0	2639.0
10°	3280.4	3288.1	3317.2	3375.3	3417.9	3439.3	3396.6	3259.1	3200.9	3063.4	2794.0
12.5°	3226.1	3237.7	3284.2	3381.1	3499.3	3607.8	3635.0	3514.8	3462.5	3286.2	2976.2
15°	3154.4	3164.1	3228.1	3359.8	3538.1	3737.6	3850.0	3797.7	3739.6	3555.5	3177.7
17.5°	3044.0	3057.5	3146.7	3324.9	3555.5	3840.3	4082.5	4100.0	4059.3	3859.7	3400.5
20°	2982.0	2991.7	3071.1	3255.2	3543.9	3915.9	4299.6	4464.2	4419.7	4210.4	3656.3
22.5°	3034.3	3042.0	3094.4	3237.7	3505.1	3958.5	4501.1	4828.5	4803.3	4586.3	3925.6
25°	3309.4	3334.6	3303.6	3328.8	3522.6	3981.8	4663.8	5192.8	5198.6	4979.7	4204.6
27.5°	3867.5	3834.5	3760.9	3635.0	3658.2	4043.8	4803.3	5535.7	5586.1	5363.3	4452.6
30°	4435.2	4415.8	4371.2	4175.5	4012.8	4181.4	4921.5	5886.5	5965.9	5741.1	4673.5
32.5°	5072.7	5092.0	5012.6	4778.1	4501.1	4460.4	5043.6	6219.7	6368.9	6169.3	4933.1
35°	5834.1	5840.0	5683.0	5423.4	5109.5	4921.5	5262.5	6587.9	6863.0	6715.7	5280.0
37.5°	6576.2	6611.1	6525.9	6117.0	5838.0	5495.1	5624.9	7060.6	7448.2	7390.0	5715.9
40°	7233.1	7287.3	7260.2	6864.9	6498.7	6210.0	6186.8	7614.8	8155.4	8221.3	6291.4
42.5°	7756.2	7791.1	7812.4	7531.5	7207.9	7045.1	6880.4	8258.1	8990.5	9259.8	6996.7
45°	8308.5	8320.1	8364.7	8174.8	7891.9	7905.4	7700.1	9038.9	9870.2	10410.8	7806.6
47.5°	9011.8	9050.6	9029.3	8829.7	8573.9	8727.0	8546.8	9843.0	10738.2	11639.2	8635.9
50°	9868.2	9908.9	9889.6	9657.0	9372.2	9436.2	9323.8	10623.9	11575.3	12797.9	9325.7
52.5°	10310.0	10343.0	10583.2	10687.8	10538.6	10131.8	9986.4	11482.3	12282.5	13751.2	9959.3
55°	10096.9	10120.1	10643.3	11085.1	11631.5	11224.6	10653.0	12144.9	12906.4	14495.2	10430.1
57.5°	9213.3	9339.3	10050.4	10798.3	11947.3	12303.8	11734.2	12865.7	13507.1	15012.6	10893.2
60°	7401.7	7395.8	8415.0	9757.8	11331.1	12600.3	13261.0	13840.3	14109.7	15409.8	11513.3
62.5°	4090.3	4127.1	5483.4	7252.5	9618.3	11833.0	14406.1	15524.1	15483.4	16103.5	12484.0
65°	2036.4	2110.1	2846.3	4154.2	6399.9	9779.1	14603.8	18093.4	17977.1	17736.9	14489.4
67.5°	1292.4	1321.4	1728.3	2414.3	3557.4	6285.6	13373.4	20009.7	20279.0	19674.5	16479.4
70°	837.0	885.5	1201.3	1650.8	2146.9	3239.7	9796.5	18767.7	19385.8	19461.3	15239.3
72.5°	455.3	490.2	767.3	1178.1	1550.1	1619.8	5502.8	14084.5	15078.5	16508.4	11922.1
75°	259.6	284.8	420.5	800.2	1137.4	986.2	2439.4	9428.4	10062.0	11798.1	8542.9
77.5°	156.9	178.3	236.4	389.5	713.0	658.8	922.3	5739.2	6142.2	7039.3	4483.6
80°	71.7	85.3	149.2	215.1	389.5	312.0	352.6	2675.8	2763.0	2889.0	1484.2
82.5°	32.9	38.8	67.8	127.9	220.9	180.2	135.6	618.1	870.0	823.5	377.8
85°	3.9	3.9	25.2	52.3	62.0	46.5	56.2	139.5	176.3	248.0	108.5
87.5°	0.0	0.0	1.9	1.9	3.9	5.8	11.6	17.4	25.2	40.7	27.1
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°	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1	2356.1
2.5°	2392.9	2338.7	2290.3	2218.6	2170.1	2115.9	2079.1	2034.5	2017.0	2003.5	1984.1
5°	2447.2	2360.0	2241.8	2110.1	2001.5	1898.9	1803.9	1741.9	1687.7	1679.9	1652.8
7.5°	2536.3	2406.5	2206.9	1991.9	1807.8	1637.3	1503.6	1395.1	1340.8	1323.4	1292.4
10°	2654.5	2476.3	2154.6	1825.2	1559.8	1356.3	1205.2	1083.1	997.9	966.9	943.6
12.5°	2786.3	2540.2	2071.3	1619.8	1317.6	1085.1	893.2	763.4	709.2	689.8	672.3
15°	2937.4	2600.3	1939.5	1414.5	1081.2	798.3	662.7	606.5	583.2	577.4	571.6
17.5°	3082.7	2639.0	1782.6	1201.3	831.2	620.0	556.1	534.8	529.0	523.2	519.3
20°	3247.4	2666.1	1598.5	999.8	645.2	525.1	494.1	478.6	467.0	455.3	453.4
22.5°	3416.0	2666.1	1399.0	802.2	540.6	470.8	436.0	406.9	385.6	374.0	370.1
25°	3576.8	2629.3	1201.3	641.3	476.7	418.5	374.0	341.0	312.0	298.4	294.5
27.5°	3691.1	2534.4	1028.9	542.5	432.1	372.0	317.8	281.0	257.7	244.1	242.2
30°	3762.8	2392.9	870.0	484.4	393.3	323.6	269.3	238.3	220.9	211.2	207.3
32.5°	3817.1	2218.6	728.5	443.7	356.5	281.0	234.5	209.3	193.8	186.0	184.1
35°	3925.6	2053.9	623.9	406.9	317.8	246.1	205.4	186.0	174.4	164.7	162.8
37.5°	4076.7	1916.3	540.6	374.0	281.0	218.9	186.0	168.6	158.9	149.2	147.3
40°	4299.6	1829.1	478.6	341.0	248.0	197.6	170.5	155.0	141.4	131.8	129.8
42.5°	4642.5	1788.4	437.9	308.1	218.9	178.3	156.9	137.6	124.0	114.3	112.4
45°	5051.3	1809.7	403.0	275.1	199.6	164.7	139.5	120.1	106.6	96.9	94.9
47.5°	5489.2	1885.3	374.0	244.1	180.2	151.1	124.0	102.7	91.1	81.4	79.4
50°	5946.5	2009.3	348.8	215.1	164.7	135.6	106.6	89.1	77.5	69.8	67.8
52.5°	6343.7	2177.9	323.6	193.8	151.1	120.1	93.0	77.5	65.9	58.1	56.2
55°	6723.5	2336.8	304.2	174.4	135.6	104.6	81.4	65.9	56.2	48.4	46.5
57.5°	7136.2	2505.3	281.0	156.9	122.1	93.0	71.7	56.2	48.4	40.7	38.8
60°	7736.9	2755.3	246.1	143.4	106.6	81.4	62.0	50.4	42.6	32.9	31.0
62.5°	8603.0	3210.6	207.3	124.0	91.1	69.8	52.3	42.6	34.9	27.1	23.3
65°	10222.8	3985.7	170.5	102.7	73.6	58.1	44.6	34.9	27.1	19.4	17.4
67.5°	11389.3	4187.2	137.6	83.3	60.1	44.6	36.8	27.1	19.4	13.6	11.6
70°	9957.4	3007.2	106.6	67.8	50.4	34.9	29.1	21.3	13.6	9.7	7.8
72.5°	7502.4	1964.7	79.4	52.3	38.8	29.1	21.3	17.4	11.6	7.8	5.8
75°	5287.7	1135.4	58.1	38.8	27.1	21.3	17.4	13.6	9.7	5.8	5.8
77.5°	2710.7	468.9	40.7	27.1	19.4	13.6	11.6	7.8	7.8	5.8	3.9
80°	823.5	155.0	23.3	17.4	13.6	9.7	5.8	5.8	5.8	3.9	1.9
82.5°	187.9	50.4	13.6	13.6	9.7	7.8	5.8	1.9	1.9	0.0	0.0
85°	48.4	15.5	11.6	9.7	9.7	7.8	3.9	1.9	0.0	0.0	0.0
87.5°	17.4	9.7	9.7	9.7	7.8	5.8	3.9	0.0	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)