

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: P454289

Luminaire Tested: **GALN-SA5B-827-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454289
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-SA5B-827-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 800mA 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: 17231 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

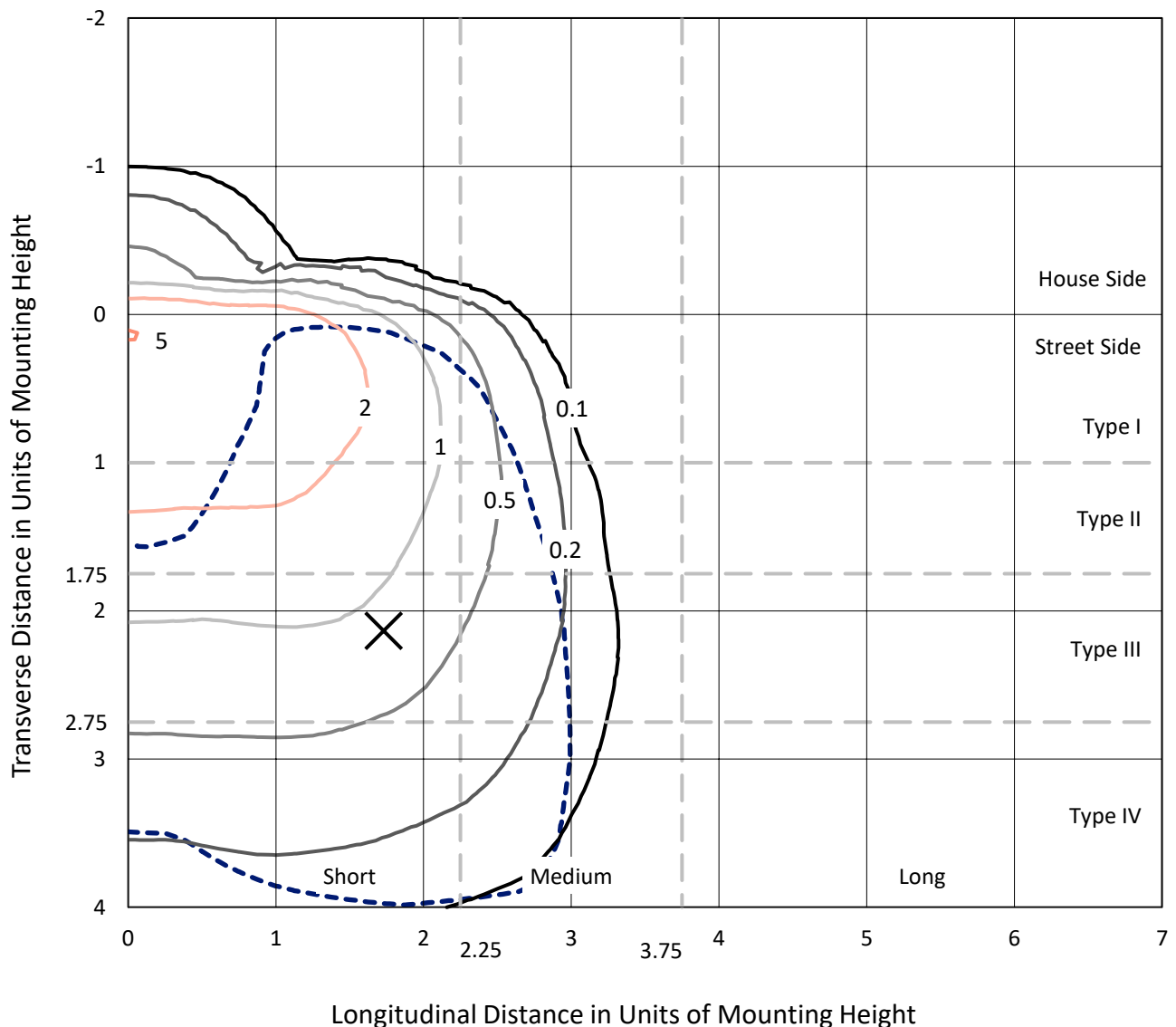
Input Watts (W): 204
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

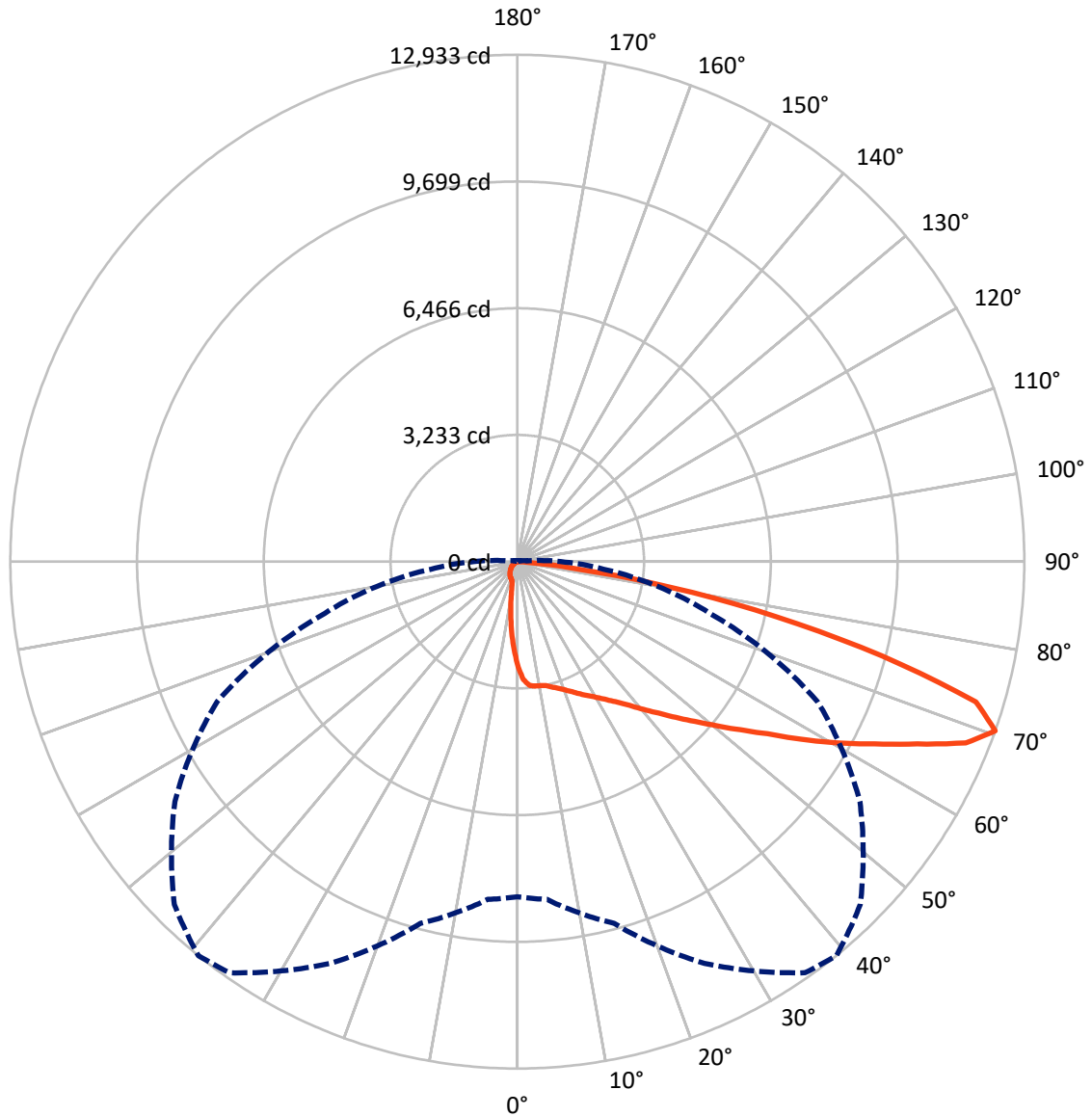
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	1123.5	0.0	1123.5
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	16107.5	0.0	16107.5
	% Fixture	93.5	0.0	93.5
Total	Lumens	17231.0	0.0	17231.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.3	1.3
10°-20°	595.9	3.5
20°-30°	998.4	5.8
30°-40°	1548.3	9.0
40°-50°	2453.7	14.2
50°-60°	3596.7	20.9
60°-70°	4610.1	26.8
70°-80°	2896.8	16.8
80°-90°	301.8	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°	17231.0	100.0
0°-180°	17231.0	100.0



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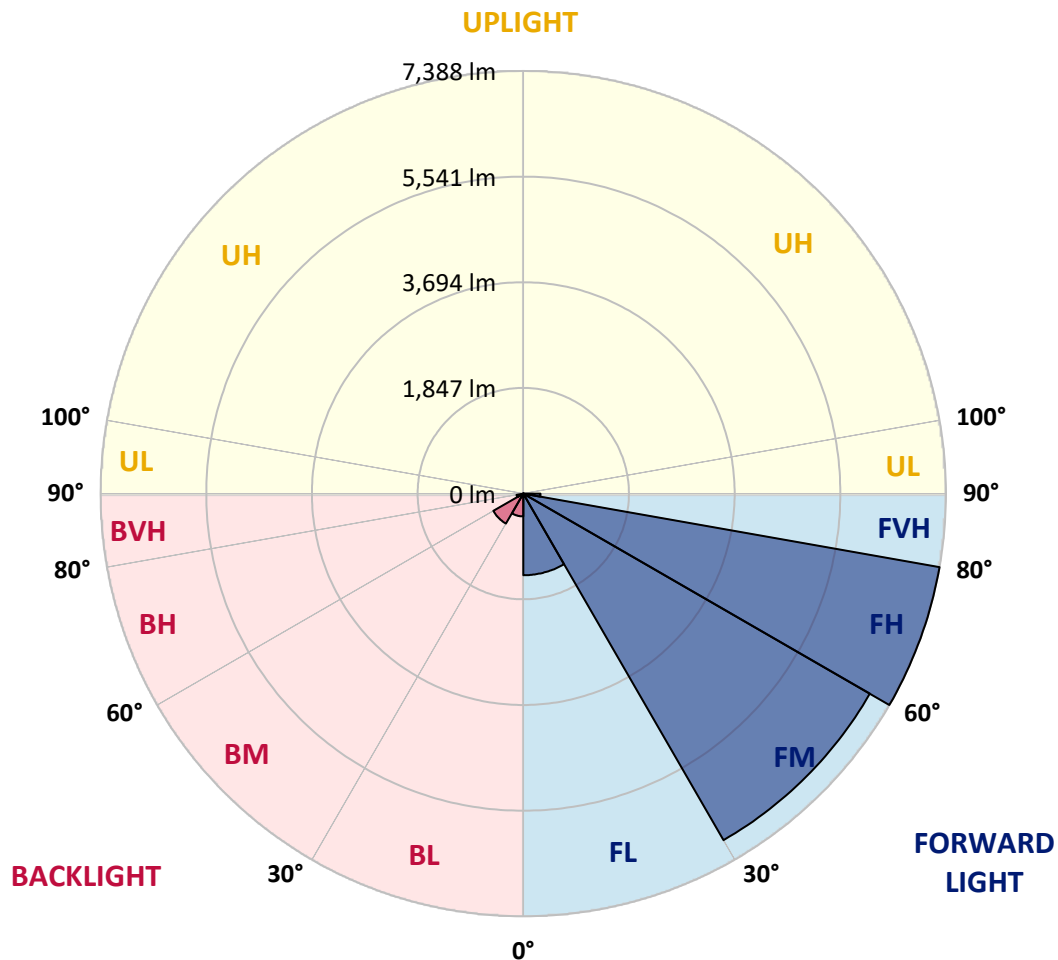
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1425.8	8.3			
FM (30°-60°)	6994.0	40.6			
FH (60°-80°)	7388.1	42.9			G3/7500
FVH (80°-90°)	299.6	1.7			G3/500
BL (0°-30°)	397.8	2.3	B1/500		
BM (30°-60°)	604.7	3.5	B1/1000		
BH (60°-80°)	118.8	0.7	B1/500		G1/500
BVH (80°-90°)	2.2	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°	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6
2.5°	3106.6	3096.2	3082.3	3066.1	3019.8	3011.7	2983.9	2924.8	2854.2	2796.3	2716.4
5°	3253.7	3259.5	3249.0	3220.1	3186.5	3166.8	3132.1	3040.6	2949.2	2832.2	2701.4
7.5°	3287.3	3298.8	3286.1	3258.3	3225.9	3205.0	3177.3	3098.5	2992.0	2858.8	2679.4
10°	3283.8	3297.7	3289.6	3264.1	3237.5	3217.8	3187.7	3125.2	3039.5	2899.4	2686.3
12.5°	3278.0	3296.5	3295.4	3282.6	3260.6	3245.6	3227.0	3171.5	3091.6	2958.4	2724.5
15°	3261.8	3284.9	3305.8	3316.2	3317.4	3317.4	3294.2	3235.2	3158.7	3036.0	2774.3
17.5°	3268.7	3295.4	3347.5	3377.6	3398.4	3396.1	3371.8	3308.1	3223.6	3115.9	2826.4
20°	3311.6	3347.5	3420.4	3480.6	3501.5	3494.5	3462.1	3388.0	3291.9	3184.2	2877.4
22.5°	3416.9	3449.4	3540.8	3611.5	3626.5	3608.0	3561.7	3460.9	3374.1	3258.3	2938.7
25°	3574.4	3612.6	3697.2	3750.4	3750.4	3740.0	3675.2	3557.0	3466.7	3361.4	3018.6
27.5°	3765.5	3797.9	3881.3	3928.7	3900.9	3870.8	3806.0	3663.6	3576.7	3491.0	3114.7
30°	3958.8	3979.7	4067.7	4088.5	4059.6	4021.4	3951.9	3809.5	3733.0	3667.0	3253.7
32.5°	4141.8	4186.9	4259.9	4255.3	4215.9	4197.4	4133.7	3982.0	3939.2	3932.2	3448.2
35°	4324.7	4359.5	4424.3	4440.5	4405.8	4402.3	4356.0	4243.7	4244.8	4290.0	3751.6
37.5°	4482.2	4513.5	4589.9	4625.8	4632.7	4650.1	4631.6	4557.5	4662.8	4786.7	4153.4
40°	4614.2	4658.2	4755.5	4818.0	4889.8	4953.5	4956.9	4973.1	5185.0	5398.1	4677.9
42.5°	4717.3	4778.6	4919.9	5035.7	5200.1	5281.1	5346.0	5435.1	5791.8	6110.2	5296.2
45°	4851.6	4922.2	5098.2	5280.0	5537.0	5670.2	5760.5	5999.0	6505.0	6939.3	5930.7
47.5°	5073.9	5110.9	5290.4	5555.6	5893.7	6083.6	6259.6	6620.8	7270.4	7659.5	6458.7
50°	5359.9	5384.2	5519.7	5887.9	6325.6	6575.7	6896.4	7321.4	8064.7	8256.9	6757.5
52.5°	5676.0	5684.1	5786.0	6253.8	6809.6	7124.5	7483.5	8008.0	8712.0	8683.0	6955.5
55°	6043.0	6031.5	6118.3	6650.9	7382.7	7742.8	8160.8	8710.8	9273.6	8985.2	7068.9
57.5°	6463.4	6432.1	6516.6	7177.8	8116.8	8547.6	8972.5	9317.6	9708.9	9238.8	7123.4
60°	6903.4	6840.8	6941.6	7769.5	8981.8	9390.5	9743.7	9836.3	10167.5	9440.3	7029.6
62.5°	7254.2	7255.4	7442.9	8399.4	9871.0	10228.8	10416.4	10499.8	10562.3	9396.3	6536.3
65°	7801.9	7820.4	8120.3	9273.6	10900.4	11210.7	11339.2	11068.3	10579.7	8849.8	5795.3
67.5°	8366.9	8426.0	8974.8	10477.8	12089.6	12339.7	12174.1	11178.3	10107.2	7602.7	4394.2
70°	8551.0	8648.3	9552.6	11306.8	12802.8	12932.5	12372.1	10665.4	8449.1	5083.1	2211.6
72.5°	7835.5	7992.9	9220.3	11004.6	12347.8	12235.5	11069.5	8944.7	5371.5	1930.2	675.1
75°	5525.5	5594.9	7662.9	9128.8	9931.2	9612.8	8420.2	5766.3	2209.3	541.9	231.6
77.5°	2853.0	2819.5	4557.5	6056.9	7082.8	6752.8	5513.9	2985.0	837.2	225.8	143.6
80°	1475.2	1499.5	1971.9	3173.8	4323.6	3978.5	2939.9	1383.7	445.8	125.1	110.0
82.5°	826.7	775.8	1133.6	1386.0	2021.7	1585.2	1127.8	979.6	194.5	75.3	104.2
85°	150.5	157.5	621.8	749.2	701.7	445.8	363.6	654.2	56.7	41.7	72.9
87.5°	2.3	2.3	120.4	215.4	136.6	62.5	114.6	93.8	11.6	16.2	12.7
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°	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6	2688.6
2.5°	2675.9	2631.9	2549.7	2468.6	2365.6	2281.0	2224.3	2165.3	2105.0	2109.7	2123.6
5°	2629.6	2553.2	2391.0	2219.7	2055.3	1907.0	1761.2	1630.3	1577.0	1528.4	1530.7
7.5°	2583.3	2475.6	2238.2	1969.6	1720.6	1468.2	1285.3	1134.7	1054.8	994.6	977.3
10°	2562.4	2420.0	2098.1	1728.7	1375.6	1100.0	864.9	742.2	647.3	617.2	625.3
12.5°	2571.7	2392.2	1971.9	1511.1	1090.7	766.5	602.1	539.6	518.7	515.3	512.9
15°	2589.0	2372.5	1848.0	1270.2	801.3	569.7	506.0	494.4	492.1	489.8	490.9
17.5°	2612.2	2355.2	1716.0	1044.4	614.8	497.9	479.4	473.6	472.4	472.4	472.4
20°	2635.4	2335.5	1568.9	842.9	512.9	470.1	458.5	455.1	453.9	453.9	452.7
22.5°	2662.0	2318.1	1419.6	662.3	472.4	450.4	440.0	437.7	436.5	435.4	435.4
25°	2700.2	2296.1	1260.9	541.9	446.9	431.9	421.5	419.2	418.0	413.4	414.5
27.5°	2751.2	2279.9	1097.7	467.8	423.8	408.7	401.8	398.3	396.0	392.5	393.7
30°	2820.6	2266.0	924.0	427.3	397.2	384.4	377.5	375.2	372.8	369.4	369.4
32.5°	2941.0	2271.8	741.1	394.8	372.8	357.8	350.8	348.5	346.2	342.7	342.7
35°	3121.7	2305.4	592.8	367.1	343.9	328.8	321.9	321.9	318.4	313.8	312.6
37.5°	3416.9	2391.0	475.9	340.4	316.1	302.2	294.1	291.8	288.3	281.4	280.2
40°	3765.5	2524.2	400.6	313.8	290.6	276.7	269.8	262.8	253.6	246.6	245.5
42.5°	4203.2	2660.8	347.4	287.2	266.3	253.6	245.5	233.9	220.0	210.7	209.6
45°	4659.4	2785.9	311.5	262.8	243.2	232.7	223.5	204.9	187.6	176.0	174.8
47.5°	4999.8	2809.0	282.5	239.7	223.5	213.1	200.3	177.2	154.0	143.6	140.1
50°	5160.7	2696.7	252.4	216.5	203.8	192.2	176.0	149.4	123.9	111.2	108.8
52.5°	5217.5	2502.2	228.1	195.7	184.1	170.2	150.5	120.4	97.3	84.5	83.4
55°	5194.3	2256.7	206.1	176.0	160.9	144.7	125.1	96.1	71.8	61.4	59.1
57.5°	5072.7	1944.1	184.1	156.3	137.8	121.6	99.6	71.8	48.6	39.4	38.2
60°	4745.0	1518.0	162.1	134.3	116.9	99.6	78.7	50.9	30.1	22.0	22.0
62.5°	4191.6	1126.6	141.3	112.3	98.4	79.9	55.6	32.4	16.2	11.6	10.4
65°	3502.6	831.4	118.1	94.9	82.2	62.5	39.4	19.7	8.1	3.5	2.3
67.5°	2444.3	512.9	98.4	77.6	67.2	45.2	24.3	8.1	3.5	0.0	0.0
70°	1110.4	244.3	75.3	59.1	50.9	32.4	12.7	4.6	2.3	0.0	0.0
72.5°	345.1	128.5	53.3	42.8	34.7	20.8	6.9	3.5	2.3	0.0	0.0
75°	159.8	82.2	33.6	23.2	19.7	10.4	4.6	2.3	1.2	0.0	0.0
77.5°	119.3	63.7	19.7	12.7	10.4	6.9	3.5	2.3	1.2	0.0	0.0
80°	104.2	32.4	11.6	8.1	5.8	4.6	2.3	1.2	0.0	0.0	0.0
82.5°	93.8	16.2	6.9	4.6	3.5	2.3	1.2	1.2	0.0	0.0	0.0
85°	50.9	9.3	4.6	3.5	2.3	1.2	1.2	0.0	0.0	0.0	0.0
87.5°	9.3	4.6	3.5	2.3	2.3	1.2	1.2	1.2	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)