

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: P453709

Luminaire Tested: **GALN-SA4D-730-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453709
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-SA4D-730-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3000K, 1200mA 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: 22925 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

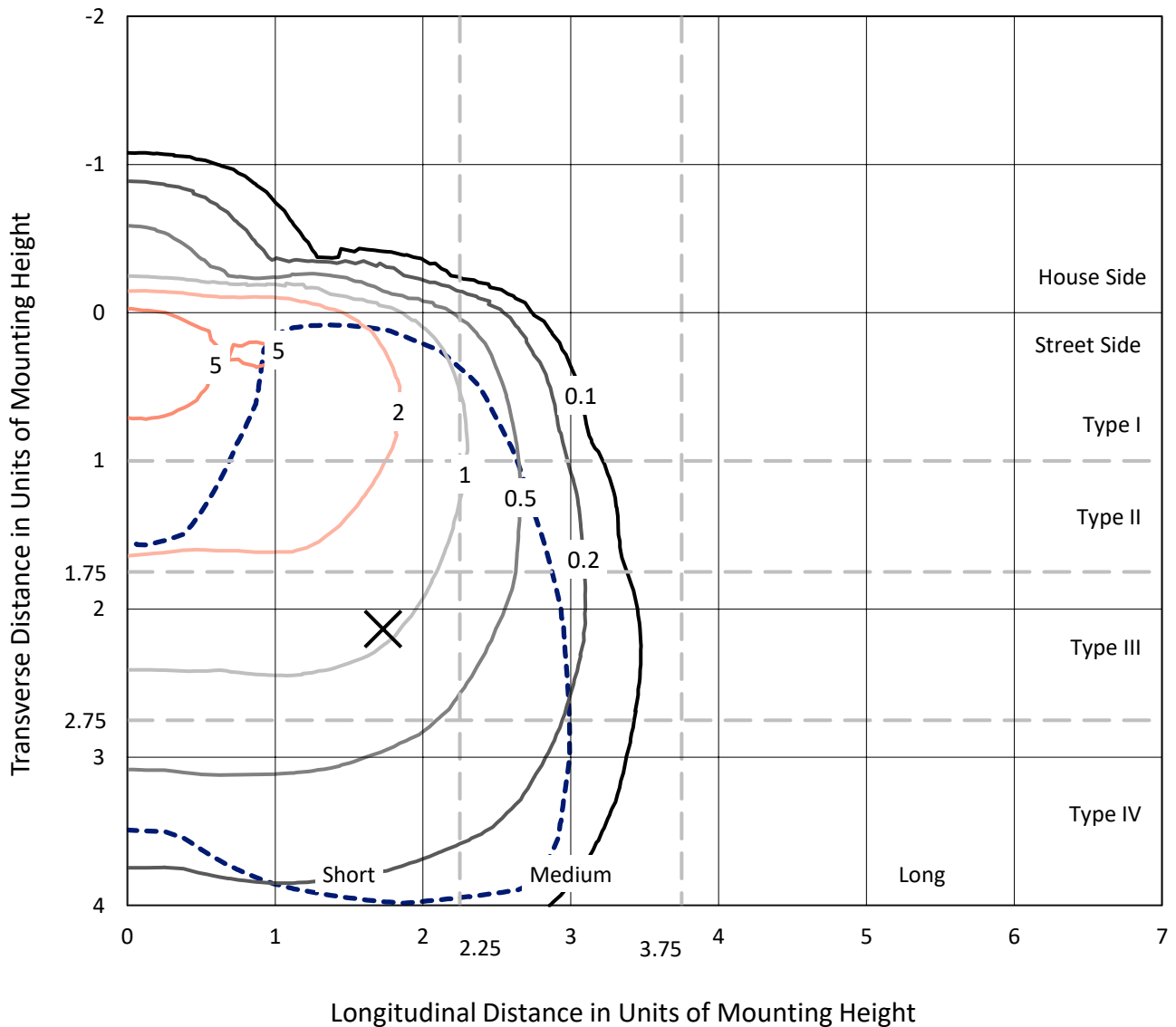
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

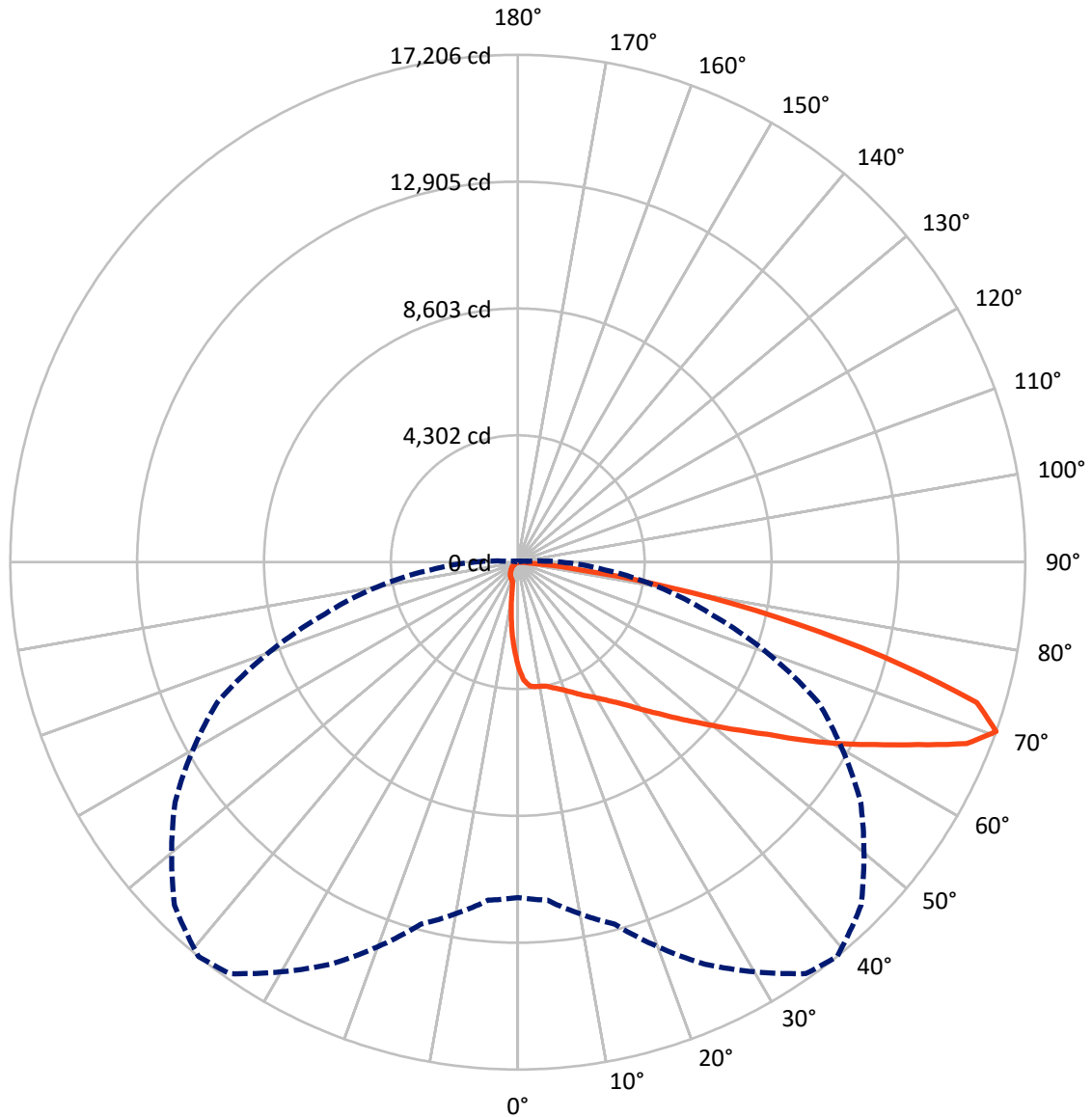
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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	1494.8	0.0	1494.8
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	21430.2	0.0	21430.2
	% Fixture	93.5	0.0	93.5
Total	Lumens	22925.0	0.0	22925.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.1	1.3
10°-20°	792.9	3.5
20°-30°	1328.3	5.8
30°-40°	2060.0	9.0
40°-50°	3264.5	14.2
50°-60°	4785.2	20.9
60°-70°	6133.5	26.8
70°-80°	3854.1	16.8
80°-90°	401.5	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°	22925.0	100.0
0°-180°	22925.0	100.0

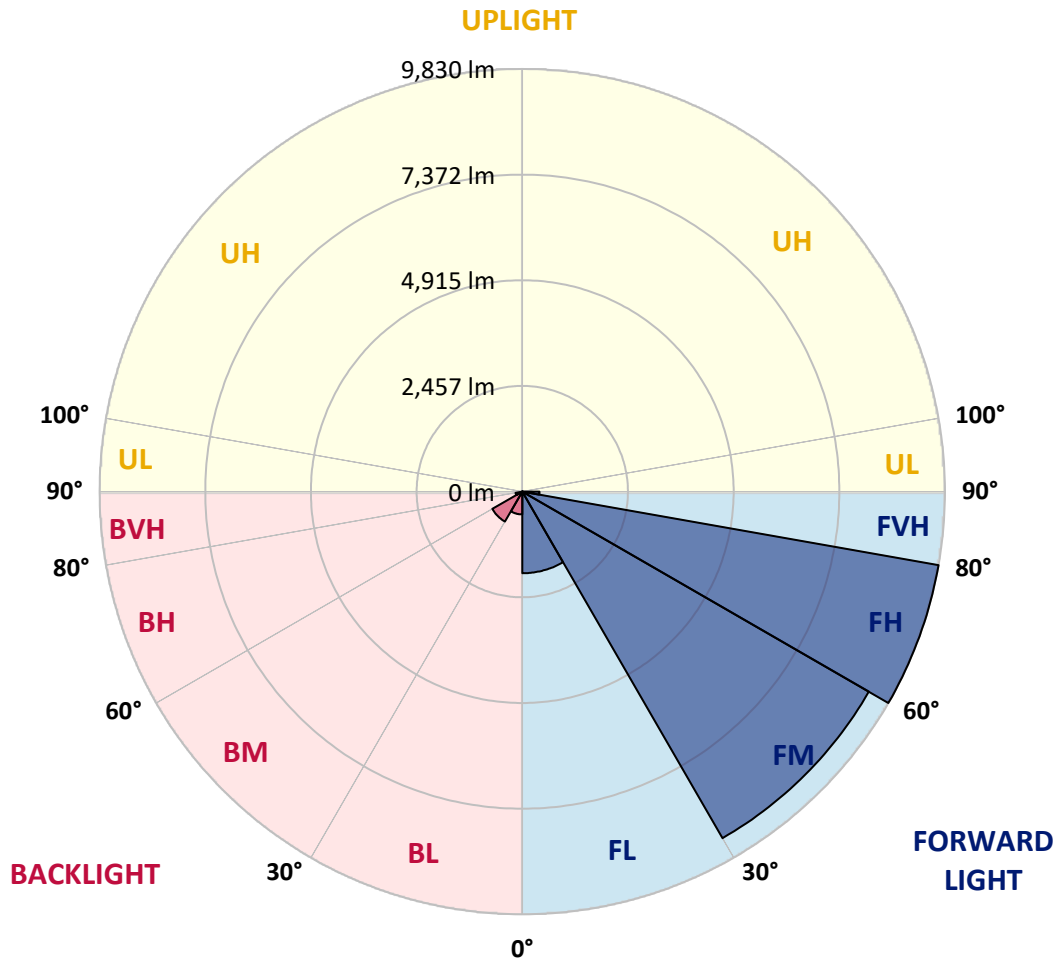


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1896.9	8.3			
FM	(30°-60°)	9305.2	40.6			
FH	(60°-80°)	9829.5	42.9			G4/12000
FVH	(80°-90°)	398.6	1.7			G3/500
BL	(0°-30°)	529.3	2.3	B2/1000		
BM	(30°-60°)	804.5	3.5	B1/1000		
BH	(60°-80°)	158.1	0.7	B1/500		G1/500
BVH	(80°-90°)	3.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1
2.5°	4133.2	4119.3	4100.9	4079.3	4017.7	4006.9	3969.9	3891.4	3797.4	3720.4	3614.1
5°	4328.9	4336.6	4322.7	4284.2	4239.5	4213.3	4167.1	4045.4	3923.7	3768.1	3594.0
7.5°	4373.5	4388.9	4372.0	4335.0	4291.9	4264.2	4227.2	4122.4	3980.7	3803.5	3564.8
10°	4368.9	4387.4	4376.6	4342.7	4307.3	4281.1	4241.1	4157.9	4043.9	3857.5	3574.0
12.5°	4361.2	4385.9	4384.3	4367.4	4338.1	4318.1	4293.4	4219.5	4113.2	3936.0	3624.8
15°	4339.6	4370.5	4398.2	4412.0	4413.6	4413.6	4382.8	4304.2	4202.5	4039.2	3691.1
17.5°	4348.9	4384.3	4453.6	4493.7	4521.4	4518.3	4486.0	4401.3	4288.8	4145.5	3760.4
20°	4405.9	4453.6	4550.7	4630.8	4658.5	4649.3	4606.2	4507.6	4379.7	4236.4	3828.2
22.5°	4546.1	4589.2	4710.9	4804.9	4824.9	4800.3	4738.6	4604.6	4489.1	4335.0	3909.8
25°	4755.6	4806.4	4918.9	4989.7	4989.7	4975.9	4889.6	4732.5	4612.3	4472.1	4016.1
27.5°	5009.8	5052.9	5163.8	5227.0	5190.0	5150.0	5063.7	4874.2	4758.7	4644.7	4144.0
30°	5267.0	5294.8	5411.8	5439.6	5401.1	5350.2	5257.8	5068.3	4966.6	4878.8	4328.9
32.5°	5510.4	5570.5	5667.6	5661.4	5609.0	5584.4	5499.7	5297.8	5240.8	5231.6	4587.7
35°	5753.8	5800.1	5886.3	5907.9	5861.7	5857.1	5795.4	5646.0	5647.5	5707.6	4991.3
37.5°	5963.4	6004.9	6106.6	6154.4	6163.6	6186.7	6162.1	6063.5	6203.7	6368.5	5525.8
40°	6139.0	6197.5	6326.9	6410.1	6505.6	6590.3	6595.0	6616.5	6898.4	7181.9	6223.7
42.5°	6276.1	6357.7	6545.7	6699.7	6918.5	7026.3	7112.6	7231.2	7705.7	8129.3	7046.3
45°	6454.8	6548.7	6782.9	7024.8	7366.8	7543.9	7664.1	7981.4	8654.6	9232.3	7890.5
47.5°	6750.6	6799.9	7038.6	7391.4	7841.2	8093.9	8328.0	8808.7	9672.9	10190.5	8593.0
50°	7131.1	7163.4	7343.7	7833.5	8415.9	8748.6	9175.3	9740.7	10729.7	10985.4	8990.5
52.5°	7551.6	7562.4	7698.0	8320.3	9059.8	9478.8	9956.4	10654.2	11590.9	11552.4	9253.9
55°	8040.0	8024.6	8140.1	8848.7	9822.4	10301.5	10857.6	11589.3	12338.0	11954.4	9404.9
57.5°	8599.2	8557.6	8670.0	9549.7	10799.0	11372.1	11937.5	12396.6	12917.3	12291.8	9477.3
60°	9184.6	9101.4	9235.4	10336.9	11949.8	12493.6	12963.5	13086.7	13527.3	12559.9	9352.5
62.5°	9651.4	9652.9	9902.5	11174.9	13132.9	13608.9	13858.5	13969.4	14052.6	12501.3	8696.2
65°	10380.0	10404.7	10803.7	12338.0	14502.5	14915.3	15086.3	14725.8	14075.7	11774.2	7710.3
67.5°	11131.8	11210.4	11940.6	13940.2	16084.6	16417.3	16197.0	14872.2	13447.2	10115.1	5846.3
70°	11376.7	11506.1	12709.3	15043.2	17033.5	17206.1	16460.5	14189.7	11241.2	6762.9	2942.4
72.5°	10424.7	10634.2	12267.2	14641.1	16428.1	16278.7	14727.4	11900.5	7146.5	2568.0	898.1
75°	7351.4	7443.8	10195.2	12145.5	13213.0	12789.4	11202.7	7671.8	2939.3	721.0	308.1
77.5°	3795.8	3751.2	6063.5	8058.5	9423.4	8984.3	7336.0	3971.5	1113.8	300.4	191.0
80°	1962.6	1995.0	2623.5	4222.6	5752.3	5293.2	3911.4	1840.9	593.1	166.4	146.3
82.5°	1099.9	1032.1	1508.2	1844.0	2689.7	2109.0	1500.5	1303.3	258.8	100.1	138.6
85°	200.3	209.5	827.3	996.7	933.6	593.1	483.7	870.4	75.5	55.5	97.1
87.5°	3.1	3.1	160.2	286.5	181.8	83.2	152.5	124.8	15.4	21.6	16.9
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°	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1	3577.1
2.5°	3560.1	3501.6	3392.2	3284.4	3147.3	3034.8	2959.3	2880.8	2800.7	2806.8	2825.3
5°	3498.5	3396.8	3181.2	2953.2	2734.4	2537.2	2343.1	2169.1	2098.2	2033.5	2036.6
7.5°	3436.9	3293.6	2977.8	2620.4	2289.2	1953.4	1710.0	1509.7	1403.4	1323.3	1300.2
10°	3409.2	3219.7	2791.4	2300.0	1830.1	1463.5	1150.8	987.5	861.2	821.1	831.9
12.5°	3421.5	3182.7	2623.5	2010.4	1451.2	1019.8	801.1	717.9	690.2	685.5	682.5
15°	3444.6	3156.5	2458.7	1689.9	1066.0	757.9	673.2	657.8	654.7	651.6	653.2
17.5°	3475.4	3133.4	2283.0	1389.5	818.0	662.4	637.8	630.1	628.5	628.5	628.5
20°	3506.2	3107.2	2087.4	1121.5	682.5	625.5	610.0	605.4	603.9	603.9	602.3
22.5°	3541.7	3084.1	1888.7	881.2	628.5	599.3	585.4	582.3	580.8	579.2	579.2
25°	3592.5	3054.9	1677.6	721.0	594.6	574.6	560.7	557.7	556.1	550.0	551.5
27.5°	3660.3	3033.3	1460.4	622.4	563.8	543.8	534.6	529.9	526.9	522.2	523.8
30°	3752.7	3014.8	1229.3	568.5	528.4	511.5	502.2	499.1	496.0	491.4	491.4
32.5°	3912.9	3022.5	985.9	525.3	496.0	476.0	466.8	463.7	460.6	456.0	456.0
35°	4153.2	3067.2	788.7	488.3	457.5	437.5	428.3	428.3	423.6	417.5	415.9
37.5°	4546.1	3181.2	633.2	452.9	420.6	402.1	391.3	388.2	383.6	374.3	372.8
40°	5009.8	3358.3	533.0	417.5	386.7	368.2	358.9	349.7	337.4	328.1	326.6
42.5°	5592.1	3540.1	462.2	382.0	354.3	337.4	326.6	311.2	292.7	280.4	278.8
45°	6199.1	3706.5	414.4	349.7	323.5	309.6	297.3	272.7	249.6	234.2	232.6
47.5°	6652.0	3737.3	375.9	318.9	297.3	283.5	266.5	235.7	204.9	191.0	186.4
50°	6866.1	3587.9	335.8	288.1	271.1	255.7	234.2	198.7	164.8	147.9	144.8
52.5°	6941.6	3329.1	303.5	260.3	244.9	226.5	200.3	160.2	129.4	112.5	110.9
55°	6910.8	3002.5	274.2	234.2	214.1	192.6	166.4	127.9	95.5	81.6	78.6
57.5°	6749.0	2586.5	244.9	208.0	183.3	161.8	132.5	95.5	64.7	52.4	50.8
60°	6313.0	2019.6	215.7	178.7	155.6	132.5	104.8	67.8	40.1	29.3	29.3
62.5°	5576.7	1498.9	187.9	149.4	130.9	106.3	73.9	43.1	21.6	15.4	13.9
65°	4660.1	1106.1	157.1	126.3	109.4	83.2	52.4	26.2	10.8	4.6	3.1
67.5°	3252.0	682.5	130.9	103.2	89.4	60.1	32.4	10.8	4.6	0.0	0.0
70°	1477.4	325.0	100.1	78.6	67.8	43.1	16.9	6.2	3.1	0.0	0.0
72.5°	459.1	171.0	70.9	57.0	46.2	27.7	9.2	4.6	3.1	0.0	0.0
75°	212.6	109.4	44.7	30.8	26.2	13.9	6.2	3.1	1.5	0.0	0.0
77.5°	158.7	84.7	26.2	16.9	13.9	9.2	4.6	3.1	1.5	0.0	0.0
80°	138.6	43.1	15.4	10.8	7.7	6.2	3.1	1.5	0.0	0.0	0.0
82.5°	124.8	21.6	9.2	6.2	4.6	3.1	1.5	1.5	0.0	0.0	0.0
85°	67.8	12.3	6.2	4.6	3.1	1.5	1.5	0.0	0.0	0.0	0.0
87.5°	12.3	6.2	4.6	3.1	3.1	1.5	1.5	1.5	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)