

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: P458971

Luminaire Tested: **GALN-SA4D-735-U-T3R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458971
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-735-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22320 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

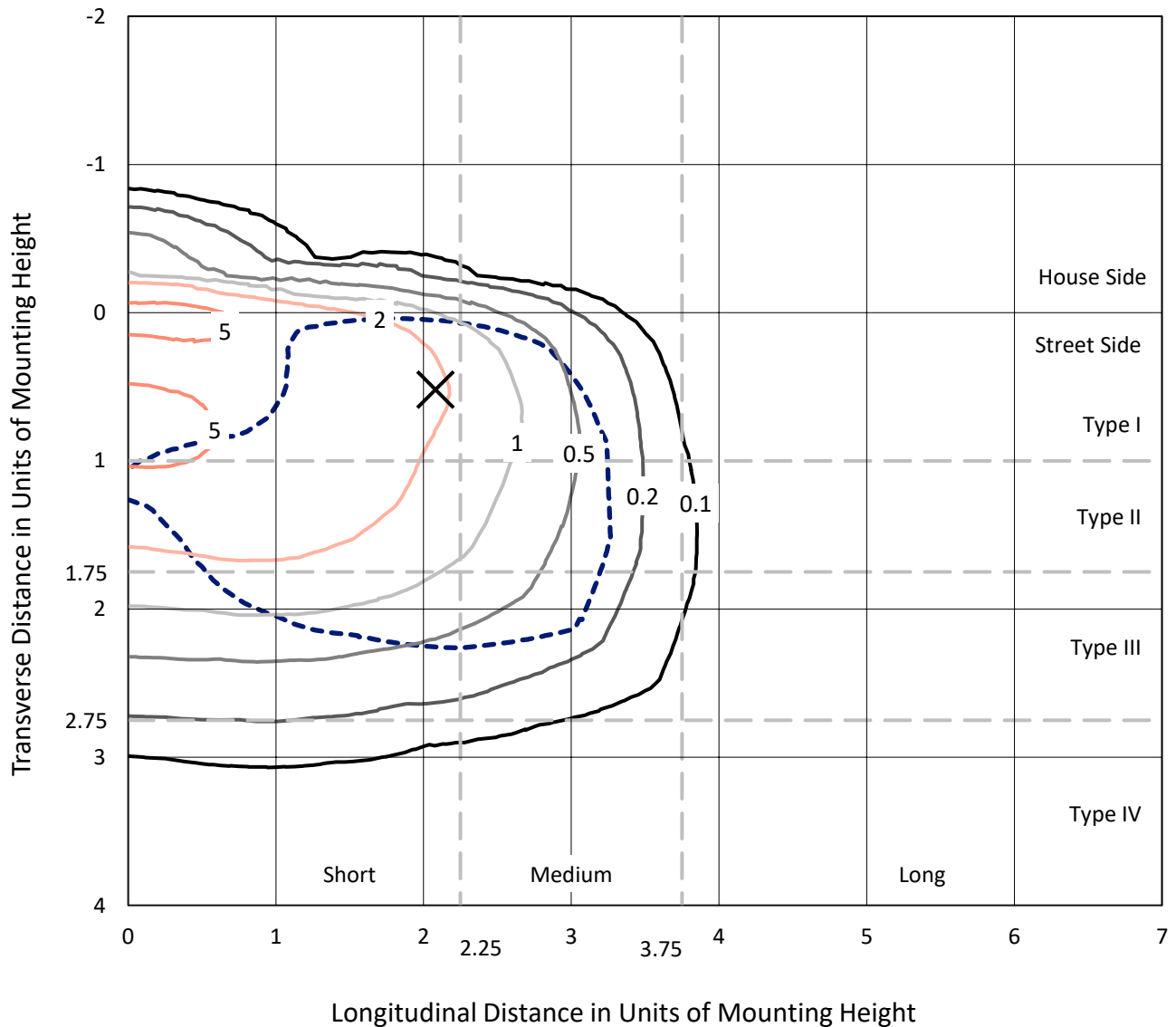
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

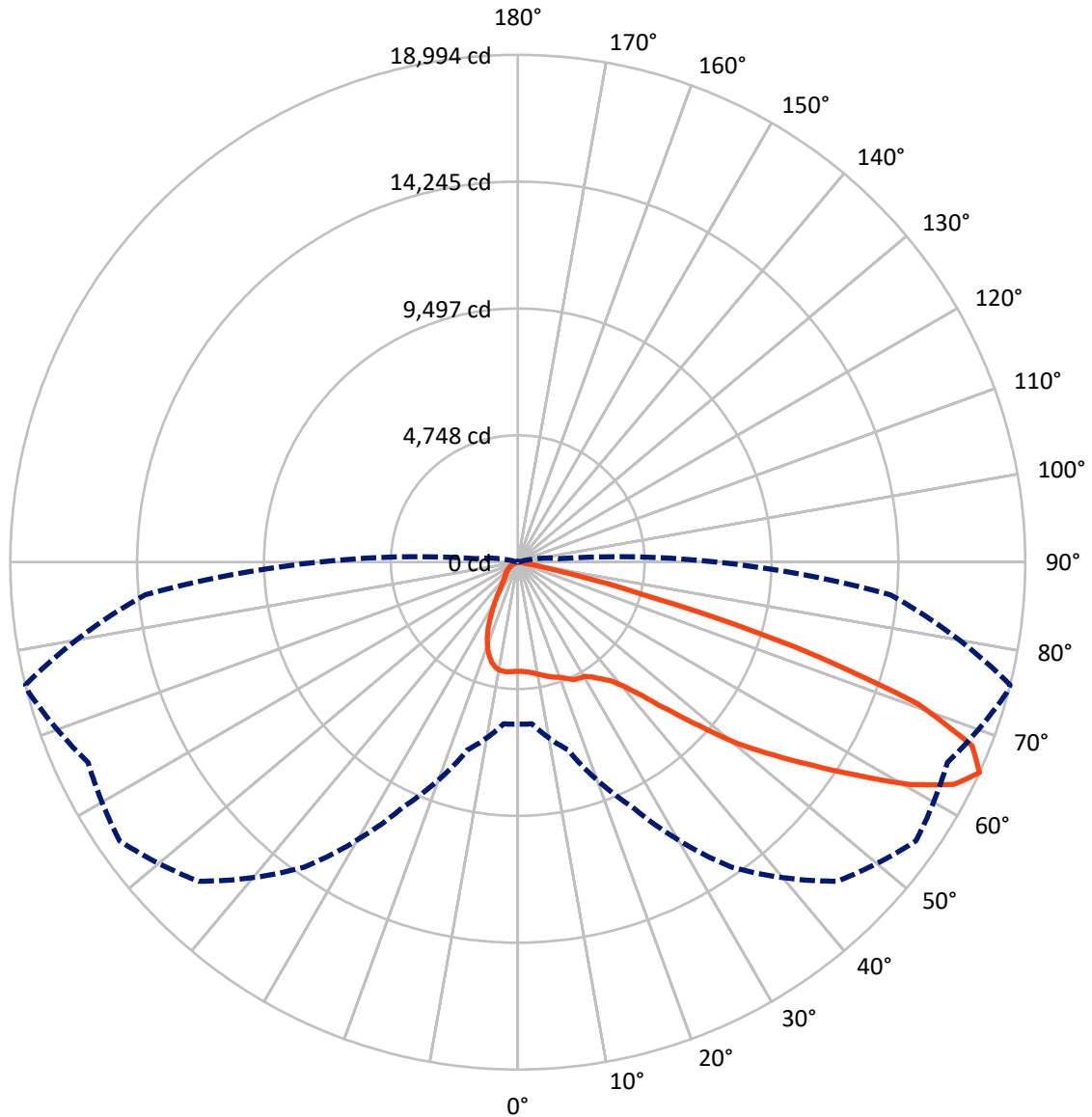
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1611.9	0.0	1611.9
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	20708.1	0.0	20708.1
	% Fixture	92.8	0.0	92.8
Total	Lumens	22320.0	0.0	22320.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.3	1.5
10°-20°	748.9	3.4
20°-30°	1206.8	5.4
30°-40°	2098.3	9.4
40°-50°	3467.3	15.5
50°-60°	5356.3	24.0
60°-70°	6540.8	29.3
70°-80°	2482.4	11.1
80°-90°	82.8	0.4
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°	22320.0	100.0
0°-180°	22320.0	100.0



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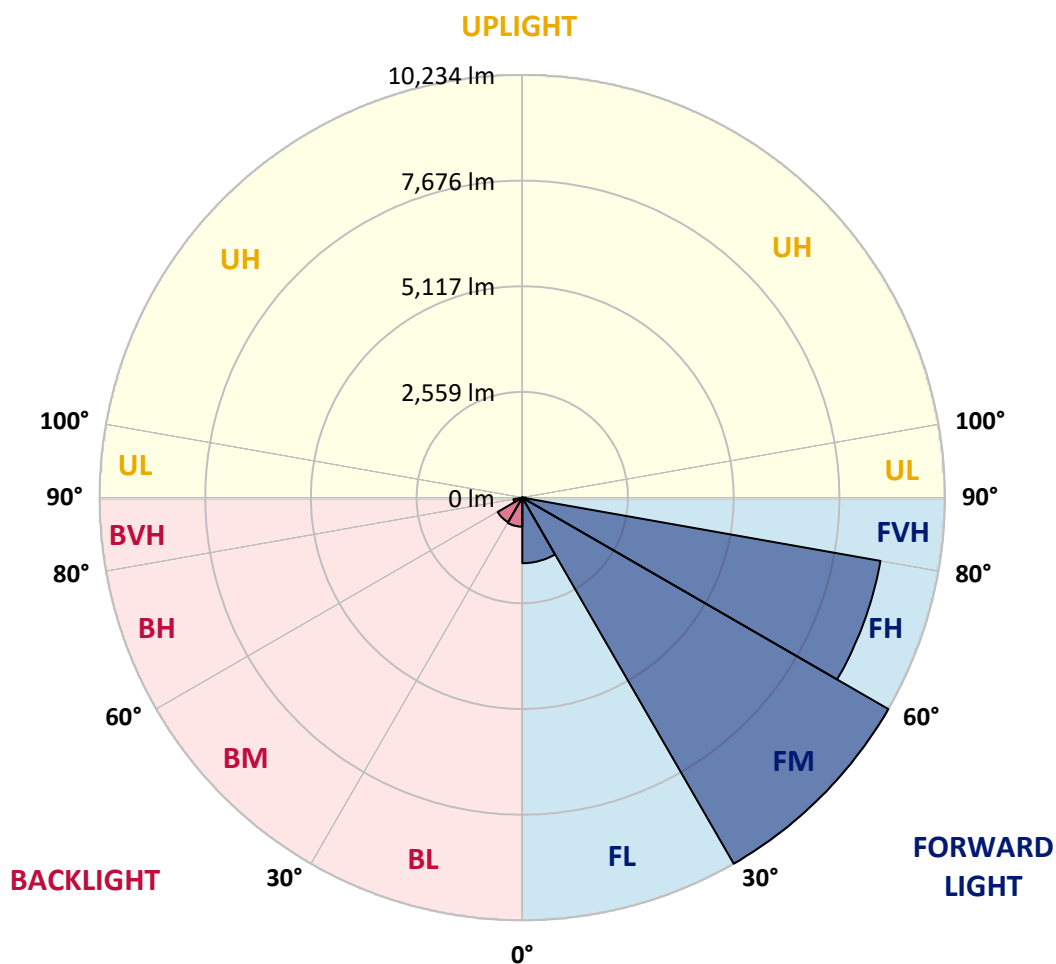
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1587.8	7.1			
FM	(30°-60°)	10234.1	45.9			
FH	(60°-80°)	8804.5	39.4			G4/12000
FVH	(80°-90°)	81.7	0.4			G1/100
BL	(0°-30°)	704.2	3.2	B2/1000		
BM	(30°-60°)	687.9	3.1	B1/1000		
BH	(60°-80°)	218.7	1.0	B1/500		G1/500
BVH	(80°-90°)	1.1	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0
2.5°	3901.8	3903.4	3912.8	3936.5	3972.7	4002.7	4027.9	4068.9	4097.2	4100.4	4109.8
5°	3632.3	3613.4	3632.3	3693.8	3749.0	3832.5	3934.9	4037.3	4128.7	4135.0	4179.2
7.5°	3329.8	3345.5	3375.5	3438.5	3542.5	3670.2	3818.3	4001.1	4174.4	4190.2	4276.9
10°	3022.5	3057.2	3106.0	3202.1	3347.1	3512.6	3714.3	3975.9	4246.9	4269.0	4418.7
12.5°	2738.8	2754.6	2814.5	2943.7	3123.3	3356.6	3635.5	3961.7	4327.3	4354.1	4570.0
15°	2521.4	2541.9	2593.9	2710.5	2910.6	3210.0	3570.9	3957.0	4406.1	4443.9	4721.3
17.5°	2480.4	2493.0	2515.1	2593.9	2768.8	3093.4	3512.6	3955.4	4481.7	4527.4	4861.5
20°	2649.0	2638.0	2615.9	2608.0	2704.2	3003.6	3470.0	3968.0	4554.2	4606.2	5009.6
22.5°	3071.3	3085.5	2956.3	2803.4	2771.9	2989.4	3463.7	4027.9	4669.3	4730.7	5175.1
25°	3968.0	3859.3	3657.6	3292.0	3016.2	3076.1	3534.6	4169.7	4803.2	4871.0	5324.8
27.5°	4959.2	4926.1	4612.5	4010.6	3496.8	3258.9	3660.7	4278.4	4847.3	4916.7	5409.9
30°	5933.1	5972.5	5613.2	4948.2	4194.9	3597.7	3778.9	4319.4	4886.7	4959.2	5518.6
32.5°	6836.1	6883.3	6568.2	5909.5	5017.5	4183.9	3982.2	4478.6	5052.2	5126.3	5699.9
35°	7546.8	7553.1	7315.1	6790.4	5915.8	4896.2	4421.8	4757.5	5276.0	5362.6	5892.1
37.5°	8199.2	8189.7	7910.8	7458.5	6664.3	5603.7	4975.0	5079.0	5531.3	5621.1	6169.5
40°	8683.0	8689.3	8599.4	8174.0	7362.4	6257.7	5413.1	5380.0	5959.9	6100.1	6572.9
42.5°	9006.0	9064.3	9108.4	8892.5	8240.1	7063.0	6086.0	6024.5	6703.7	6820.3	7143.4
45°	9267.6	9371.6	9592.2	9581.2	9083.2	8051.0	7009.4	6883.3	7757.9	7882.4	7869.8
47.5°	9458.3	9563.9	9929.5	10150.1	9875.9	9009.2	8170.8	8062.1	9017.0	9152.6	8671.9
50°	9556.0	9682.1	10148.5	10575.6	10495.2	9932.6	9494.5	9500.8	10537.7	10668.5	9601.7
52.5°	9327.5	9491.4	10265.1	11034.1	11190.1	10816.7	10734.7	10942.7	11891.4	12003.3	10441.6
55°	8597.9	8804.3	10106.0	11424.9	11995.4	11859.9	12143.5	12460.3	13371.1	13443.6	11303.6
57.5°	8136.1	8355.2	9636.4	11757.5	12963.0	13171.0	13620.1	13851.8	14898.1	15082.5	12293.2
60°	7746.9	7918.7	9250.3	11828.4	13946.3	14775.2	15211.7	15451.3	16782.9	16902.6	13382.2
62.5°	7099.2	7296.2	8597.9	11333.5	14441.1	16059.5	16964.1	16856.9	18240.5	18324.0	14050.3
65°	6057.6	6074.9	7274.1	10090.2	13930.6	16893.2	18194.8	17745.7	18937.0	18993.8	13998.3
67.5°	4521.1	4688.2	5595.9	7931.3	11766.9	16180.9	18593.5	17769.3	18497.4	18339.8	12887.3
70°	2912.2	3039.8	3793.1	5499.7	8484.4	13503.5	17271.4	16551.2	16234.5	15884.6	10548.8
72.5°	1344.2	1508.1	2253.5	3142.3	5031.7	9619.0	14020.4	13446.8	11685.0	10821.4	6705.3
75°	586.2	627.2	1112.6	1657.8	2359.1	5086.9	9244.0	8347.3	5277.5	4820.5	2683.7
77.5°	357.7	384.5	583.1	888.8	926.6	1938.3	4979.7	3641.8	1631.0	1438.8	728.0
80°	242.7	272.6	423.9	464.9	316.7	540.5	1869.0	972.3	329.4	315.2	156.0
82.5°	118.2	149.7	313.6	260.0	137.1	173.3	543.7	208.0	96.1	89.8	55.2
85°	17.3	29.9	176.5	170.2	61.5	41.0	96.1	52.0	33.1	31.5	25.2
87.5°	0.0	0.0	59.9	26.8	6.3	6.3	11.0	11.0	12.6	11.0	12.6
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°	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0	4083.0
2.5°	4114.6	4122.4	4092.5	4049.9	4004.2	3958.5	3893.9	3835.6	3801.0	3821.4	3771.0
5°	4188.6	4182.3	4103.5	3974.3	3802.5	3596.1	3391.2	3216.3	3159.6	3074.5	3065.0
7.5°	4291.1	4273.7	4106.7	3810.4	3422.8	3035.1	2656.9	2406.3	2262.9	2141.6	2144.7
10°	4434.5	4384.0	4070.4	3522.0	2883.8	2299.2	1817.0	1486.0	1342.6	1296.9	1260.7
12.5°	4582.6	4484.9	3969.6	3132.8	2245.6	1571.1	1104.7	903.0	814.7	786.4	783.2
15°	4715.0	4560.5	3793.1	2664.8	1632.6	1003.8	753.3	687.1	676.0	677.6	676.0
17.5°	4845.8	4620.4	3548.8	2168.4	1109.4	720.2	647.7	631.9	636.6	642.9	641.4
20°	4954.5	4633.0	3236.8	1654.6	784.8	631.9	608.3	605.1	609.9	614.6	614.6
22.5°	5072.7	4642.5	2866.5	1145.6	641.4	587.8	575.2	575.2	581.5	587.8	589.4
25°	5160.9	4590.5	2423.7	822.6	565.7	545.2	538.9	540.5	546.8	550.0	548.4
27.5°	5175.1	4443.9	1954.1	630.3	513.7	493.2	486.9	493.2	485.4	490.1	486.9
30°	5187.7	4258.0	1478.2	531.1	466.5	434.9	425.5	416.0	409.7	401.8	400.3
32.5°	5227.1	4038.9	1079.5	477.5	422.3	387.7	365.6	338.8	318.3	312.0	310.4
35°	5244.4	3775.7	792.7	434.9	382.9	345.1	305.7	267.9	238.0	226.9	234.8
37.5°	5310.6	3520.5	614.6	403.4	348.3	301.0	250.6	203.3	174.9	168.6	171.8
40°	5446.2	3243.1	515.3	376.6	318.3	260.0	198.6	152.9	133.9	127.6	126.1
42.5°	5663.6	2967.3	458.6	351.4	288.4	219.0	156.0	119.8	104.0	99.3	99.3
45°	5928.4	2702.6	419.2	324.6	256.9	176.5	122.9	96.1	86.7	83.5	83.5
47.5°	6276.6	2470.9	386.1	297.8	222.2	140.3	99.3	83.5	77.2	78.8	80.4
50°	6629.6	2299.2	349.8	267.9	182.8	115.0	85.1	74.1	72.5	74.1	74.1
52.5°	6895.9	2198.3	301.0	226.9	143.4	96.1	75.6	69.3	67.8	64.6	64.6
55°	7255.2	2176.3	239.5	184.4	113.5	80.4	67.8	63.0	58.3	55.2	53.6
57.5°	7717.0	2201.5	184.4	143.4	88.2	66.2	59.9	52.0	45.7	39.4	39.4
60°	8003.8	2144.7	143.4	110.3	64.6	53.6	45.7	37.8	29.9	25.2	23.6
62.5°	7912.4	1905.2	113.5	81.9	45.7	39.4	29.9	25.2	17.3	12.6	11.0
65°	7441.2	1538.0	91.4	56.7	33.1	23.6	15.8	15.8	7.9	1.6	0.0
67.5°	6513.0	1139.3	72.5	37.8	18.9	11.0	7.9	4.7	0.0	0.0	0.0
70°	5301.2	822.6	56.7	23.6	11.0	7.9	3.2	1.6	0.0	0.0	0.0
72.5°	3366.0	471.2	44.1	14.2	7.9	3.2	0.0	0.0	0.0	0.0	0.0
75°	1301.7	184.4	29.9	9.5	3.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	368.8	86.7	17.3	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	96.1	37.8	9.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.7	15.8	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	26.8	6.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.6	1.6	0.0	0.0	0.0	0.0	0.0	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)