

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: STREETWORKS

Report Number: P400004

Luminaire Tested: **ARCH-L-PA3-220-740-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-220-740-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21388 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

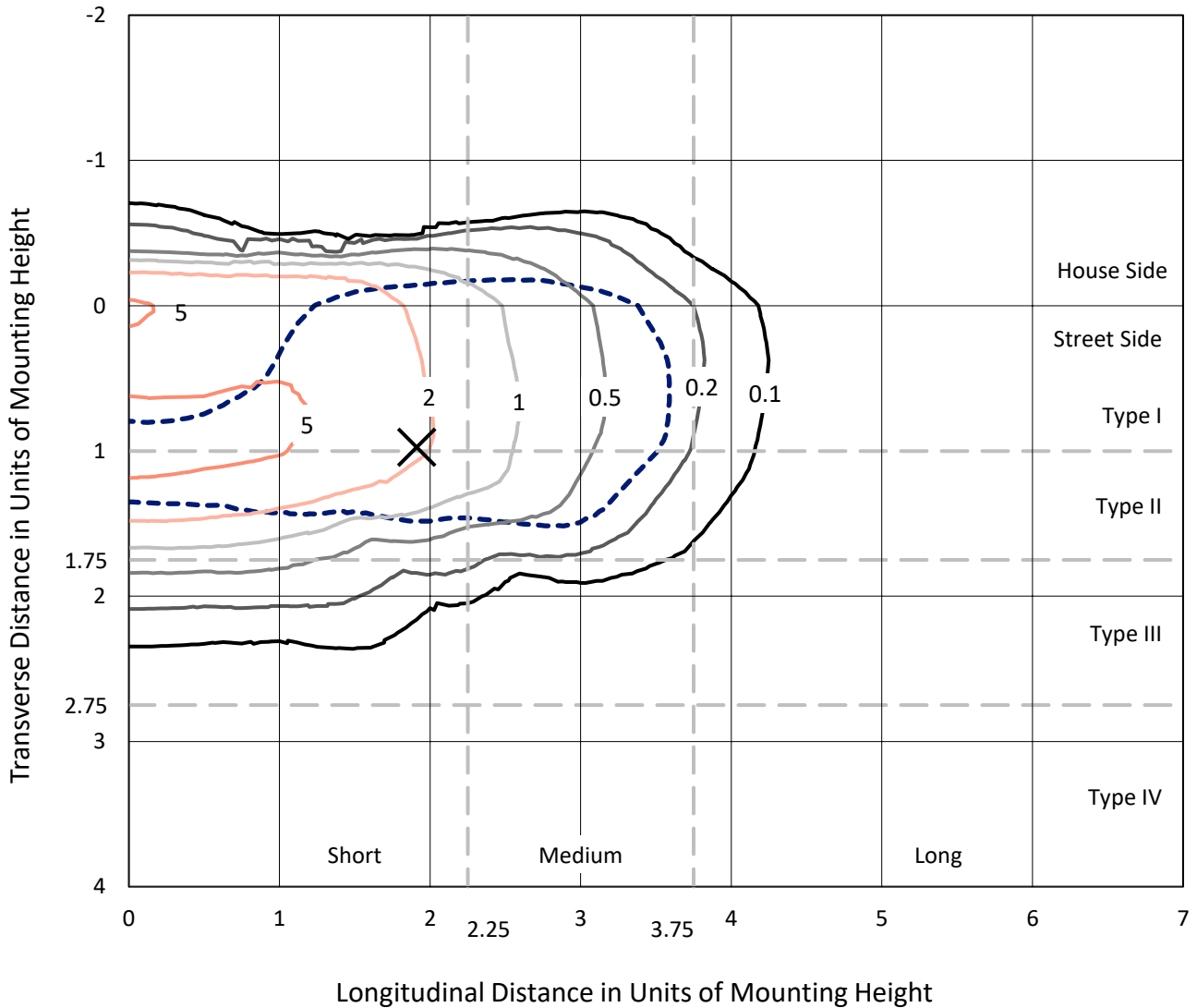
Input Watts (W): 222
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

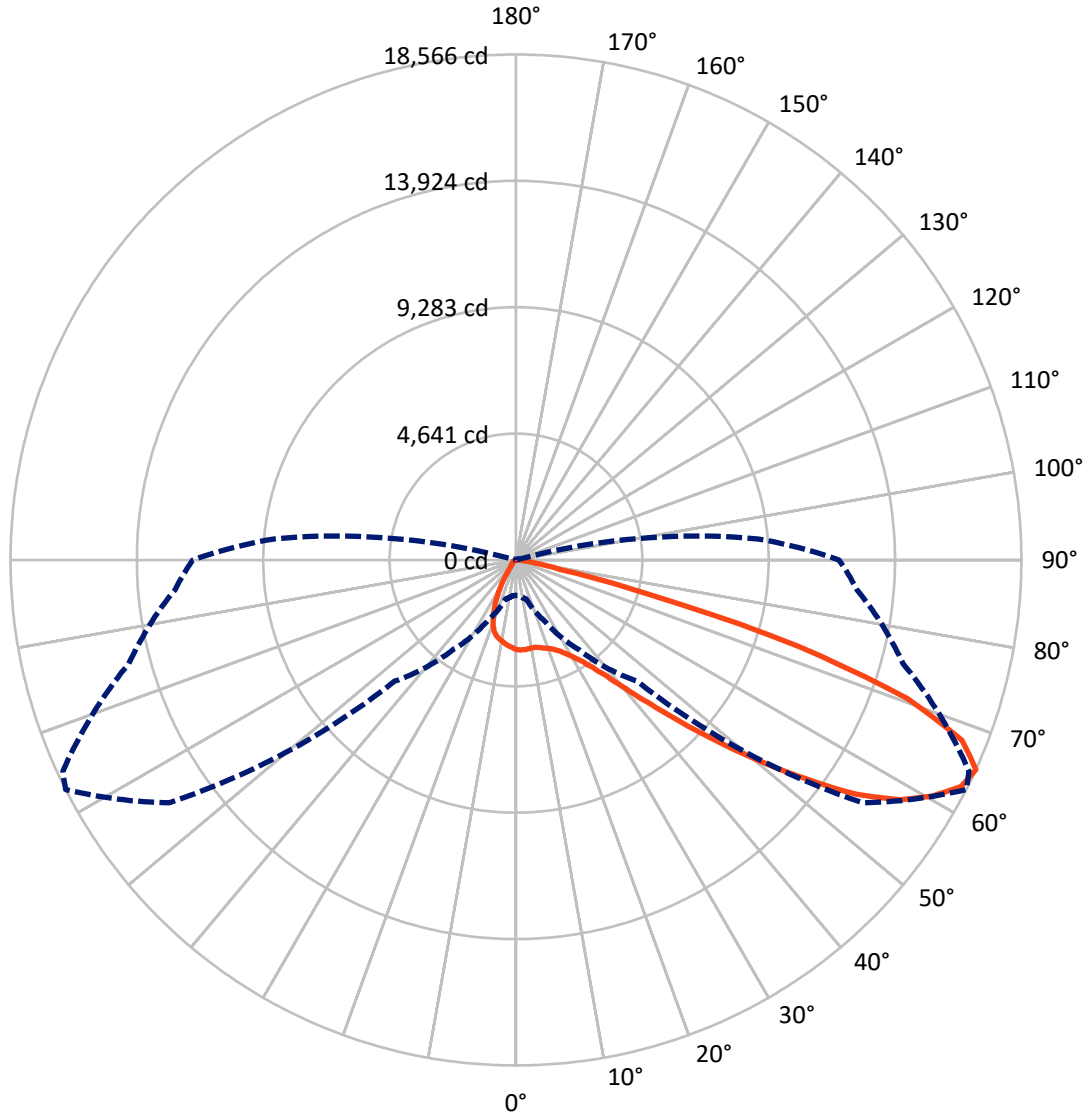
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2752.6	0.0	2752.6
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	18635.4	0.0	18635.4
	% Fixture	87.1	0.0	87.1
Total	Lumens	21388.0	0.0	21388.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.7	1.4
10°-20°	741.7	3.5
20°-30°	1099.3	5.1
30°-40°	2041.1	9.5
40°-50°	4323.9	20.2
50°-60°	5978.9	28.0
60°-70°	4786.3	22.4
70°-80°	1988.6	9.3
80°-90°	127.7	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°	21388.0	100.0
0°-180°	21388.0	100.0

Coefficient of Utilization



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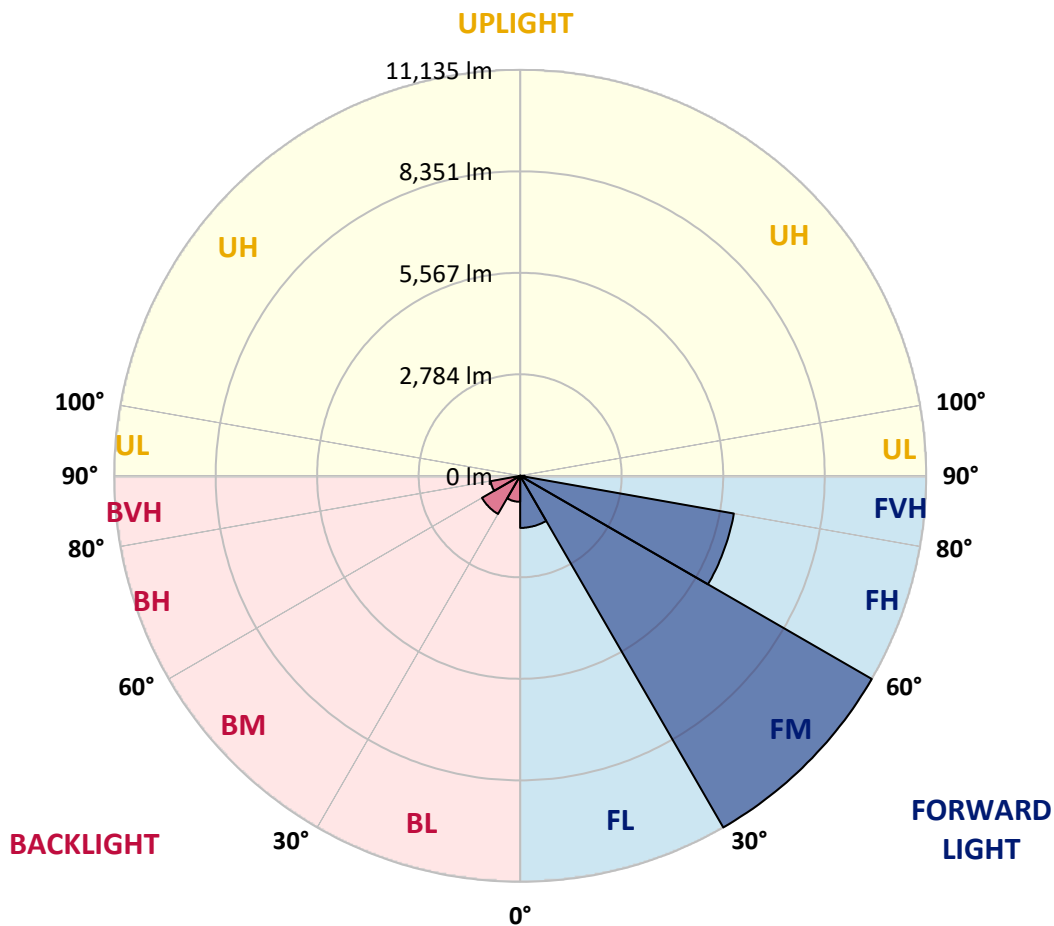
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1428.2	6.7			
FM (30°-60°)	11134.7	52.1			
FH (60°-80°)	5950.6	27.8			G3/7500
FVH (80°-90°)	121.9	0.6			G2/225
BL (0°-30°)	713.4	3.3	B2/1000		
BM (30°-60°)	1209.2	5.7	B2/2500		
BH (60°-80°)	824.2	3.9	B2/1000		G2/1000
BVH (80°-90°)	5.8	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8
2.5°	3351.4	3343.3	3335.2	3331.2	3331.2	3327.1	3311.0	3306.9	3298.9	3290.8	3282.7
5°	3319.1	3306.9	3302.9	3306.9	3311.0	3319.1	3311.0	3311.0	3302.9	3294.8	3278.7
7.5°	3238.3	3230.2	3234.3	3246.4	3250.4	3278.7	3282.7	3294.8	3294.8	3286.8	3274.6
10°	3141.4	3137.4	3137.4	3157.5	3177.7	3218.1	3246.4	3278.7	3282.7	3282.7	3262.5
12.5°	3068.7	3064.7	3076.8	3101.0	3141.4	3193.9	3242.3	3290.8	3298.9	3302.9	3270.6
15°	3024.3	3024.3	3040.5	3088.9	3145.4	3218.1	3274.6	3339.2	3347.3	3343.3	3298.9
17.5°	2983.9	2988.0	3020.3	3101.0	3165.6	3262.5	3331.2	3403.9	3407.9	3403.9	3331.2
20°	2967.8	2975.8	3024.3	3129.3	3202.0	3311.0	3399.8	3472.5	3476.5	3460.4	3363.5
22.5°	3012.2	3016.2	3076.8	3189.9	3258.5	3379.6	3492.7	3561.3	3565.4	3541.1	3411.9
25°	3165.6	3165.6	3218.1	3315.0	3375.6	3496.7	3617.9	3698.6	3698.6	3670.3	3520.9
27.5°	3525.0	3492.7	3480.6	3508.8	3529.0	3658.2	3787.4	3888.4	3884.3	3844.0	3662.3
30°	4219.5	4138.7	4009.5	3864.2	3791.5	3880.3	4001.4	4130.7	4126.6	4062.0	3835.9
32.5°	5386.4	5269.3	4962.4	4578.8	4267.9	4167.0	4280.1	4421.4	4425.4	4348.7	4114.5
35°	7021.7	6836.0	6286.8	5753.8	5043.2	4659.6	4691.9	4845.3	4893.8	4853.4	4582.9
37.5°	8596.4	8426.9	7901.9	7163.0	6198.0	5414.7	5277.4	5410.6	5467.2	5467.2	5180.5
40°	10183.3	9985.4	9521.1	8778.1	7760.6	6593.7	6101.1	6210.1	6270.7	6282.8	5907.3
42.5°	11455.2	11326.0	10970.7	10393.3	9440.3	8661.0	7288.2	7227.6	7284.2	7239.7	6751.2
45°	12335.4	12234.5	11988.2	11770.1	11305.8	10914.1	8875.1	8467.2	8503.6	8350.1	7700.1
47.5°	12517.1	12404.1	12351.6	12654.4	12985.5	13082.4	10825.3	9941.0	9904.7	9565.5	8685.3
50°	11725.7	11737.8	11931.7	12795.7	14176.7	15048.8	13086.5	11604.6	11471.3	10716.3	9601.9
52.5°	10017.7	10211.6	10700.1	12101.2	14540.1	16478.2	15347.6	13369.1	13163.2	11834.7	10288.3
55°	7837.3	8087.7	8891.2	10502.3	13781.0	17116.2	17253.5	15202.3	14733.9	12674.6	10821.3
57.5°	5826.5	5903.2	6840.0	8309.8	11984.1	16490.3	18230.6	16615.5	16013.9	13344.9	11350.2
60°	3630.0	3678.4	4667.7	6327.2	9076.9	14176.7	18230.6	17588.6	17015.2	13946.5	11834.7
62.5°	2257.1	2273.3	2644.7	4336.6	6169.7	10514.4	17475.5	18343.7	17883.4	14378.6	12250.6
65°	1300.2	1316.3	1489.9	2450.9	4013.6	6294.9	15545.5	18565.7	18359.8	14721.8	12573.7
67.5°	948.9	957.0	1025.6	1376.9	2624.6	3234.3	11677.3	17673.4	17931.8	14891.4	12565.6
70°	823.7	835.8	924.7	1074.1	1893.7	1986.6	5943.6	15262.8	15985.6	14649.1	12190.1
72.5°	633.9	650.1	783.3	1009.4	1389.0	1429.4	2152.1	10861.6	11955.9	13134.9	11160.4
75°	436.1	452.2	585.5	831.8	1146.7	1070.0	1183.1	4998.8	6307.0	8810.4	8495.5
77.5°	278.6	282.6	367.4	605.7	989.3	759.1	811.6	1631.3	2289.4	3985.3	4009.5
80°	185.7	189.8	226.1	391.7	678.3	702.6	500.7	755.1	827.7	1162.9	807.6
82.5°	113.1	113.1	153.4	246.3	411.9	581.4	327.1	395.7	424.0	448.2	210.0
85°	44.4	44.4	92.9	161.5	258.4	270.5	205.9	230.2	242.3	262.5	96.9
87.5°	12.1	12.1	52.5	88.8	113.1	125.2	125.2	113.1	121.1	149.4	48.5
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°	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8	3294.8
2.5°	3278.7	3266.6	3250.4	3234.3	3218.1	3206.0	3193.9	3193.9	3185.8	3173.7	3165.6
5°	3270.6	3250.4	3214.1	3185.8	3141.4	3109.1	3084.9	3064.7	3052.6	3024.3	3020.3
7.5°	3258.5	3234.3	3181.8	3125.2	3052.6	2996.0	2939.5	2899.1	2858.8	2826.4	2818.4
10°	3238.3	3210.0	3133.3	3052.6	2951.6	2846.6	2713.4	2560.0	2418.6	2337.9	2313.7
12.5°	3238.3	3202.0	3101.0	2992.0	2846.6	2588.2	2249.0	1909.9	1647.4	1530.3	1498.0
15°	3258.5	3210.0	3076.8	2927.4	2656.9	2132.0	1582.8	1134.6	847.9	759.1	738.9
17.5°	3278.7	3210.0	3040.5	2838.6	2309.6	1546.5	900.4	597.6	504.7	484.5	484.5
20°	3286.8	3202.0	2992.0	2673.0	1845.3	961.0	537.0	448.2	411.9	399.7	399.7
22.5°	3319.1	3206.0	2955.7	2434.8	1340.5	565.3	424.0	375.5	339.2	327.1	327.1
25°	3399.8	3254.5	2963.7	2132.0	860.0	428.0	359.4	310.9	274.6	258.4	258.4
27.5°	3529.0	3363.5	3008.2	1780.7	541.1	367.4	302.8	250.3	222.1	205.9	205.9
30°	3674.4	3484.6	3028.3	1376.9	403.8	310.9	246.3	197.9	177.7	165.5	161.5
32.5°	3928.8	3694.6	3012.2	944.8	331.1	262.5	197.9	157.5	141.3	137.3	137.3
35°	4336.6	4062.0	2979.9	593.6	274.6	210.0	157.5	129.2	117.1	113.1	109.0
37.5°	4889.8	4599.0	2883.0	391.7	226.1	165.5	129.2	109.0	96.9	92.9	92.9
40°	5564.1	5212.8	2697.2	298.8	193.8	133.2	109.0	92.9	84.8	80.8	80.8
42.5°	6335.3	5895.2	2402.5	258.4	161.5	113.1	92.9	76.7	72.7	68.6	68.6
45°	7179.2	6609.9	1994.7	230.2	137.3	92.9	76.7	68.6	60.6	60.6	56.5
47.5°	8075.6	7328.6	1534.4	201.9	117.1	80.8	68.6	56.5	52.5	48.5	48.5
50°	8939.7	7970.6	1078.1	173.6	96.9	68.6	56.5	48.5	44.4	40.4	40.4
52.5°	9549.4	8358.2	763.1	149.4	80.8	60.6	44.4	36.3	32.3	32.3	32.3
55°	10037.9	8600.5	533.0	125.2	68.6	52.5	36.3	28.3	28.3	24.2	24.2
57.5°	10498.2	8758.0	391.7	105.0	56.5	40.4	28.3	20.2	20.2	16.2	16.2
60°	10974.7	8842.8	298.8	84.8	48.5	32.3	20.2	16.2	12.1	12.1	12.1
62.5°	11455.2	8895.2	230.2	68.6	40.4	24.2	16.2	12.1	8.1	4.0	4.0
65°	11875.1	8911.4	177.7	52.5	32.3	16.2	12.1	4.0	0.0	0.0	0.0
67.5°	12000.3	8725.7	137.3	40.4	24.2	12.1	8.1	0.0	0.0	0.0	0.0
70°	11661.1	8233.0	105.0	32.3	20.2	8.1	4.0	0.0	0.0	0.0	0.0
72.5°	10348.8	6904.6	80.8	20.2	16.2	8.1	4.0	0.0	0.0	0.0	0.0
75°	7405.3	3682.5	56.5	16.2	12.1	4.0	0.0	0.0	0.0	0.0	0.0
77.5°	3407.9	1425.3	40.4	12.1	8.1	4.0	0.0	0.0	0.0	0.0	0.0
80°	666.2	355.3	16.2	8.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	153.4	60.6	8.1	8.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	52.5	20.2	4.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.2	8.1	4.0	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)