

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: P258100

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P258100
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T2U-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1030mA 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: 19075 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

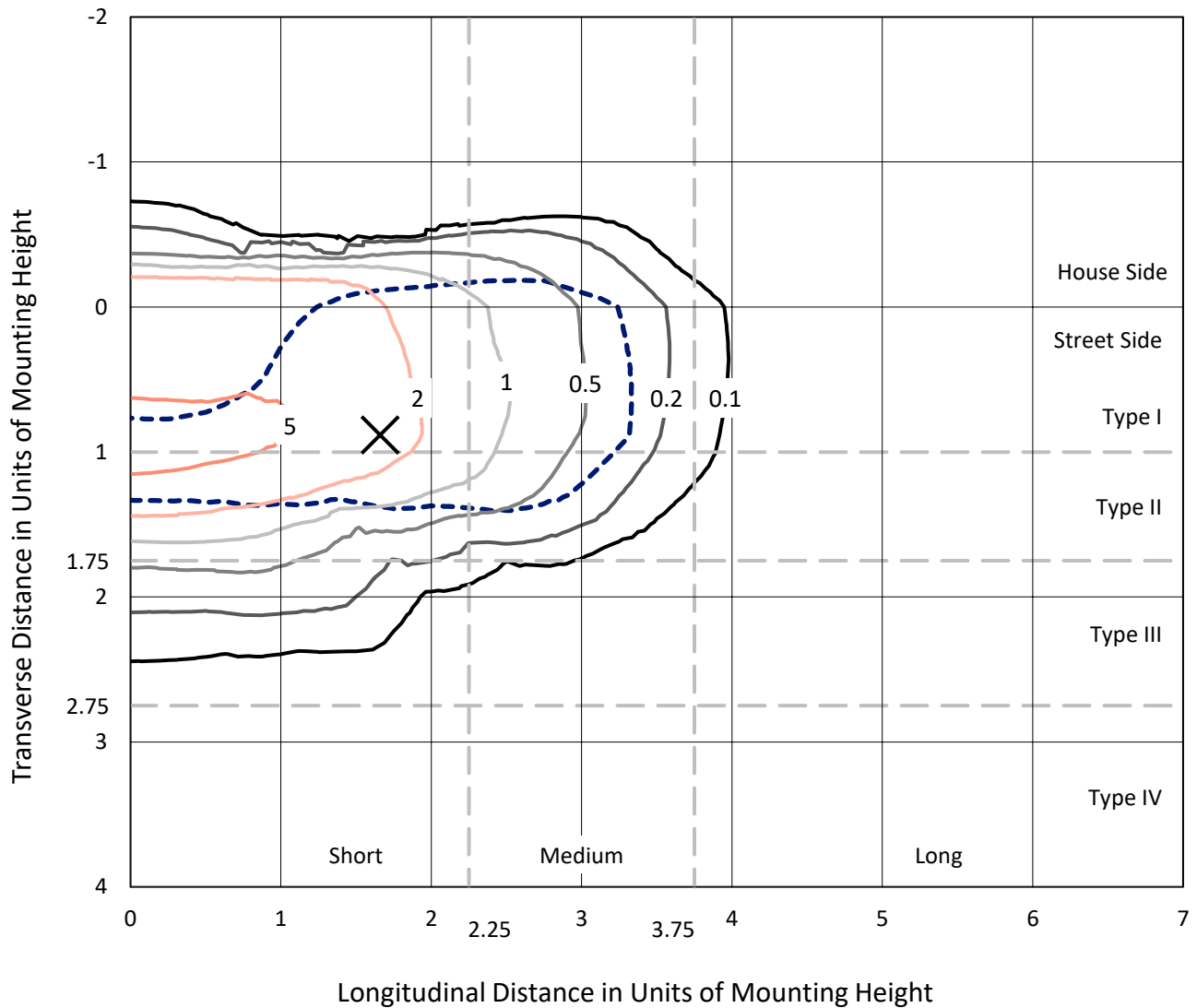
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

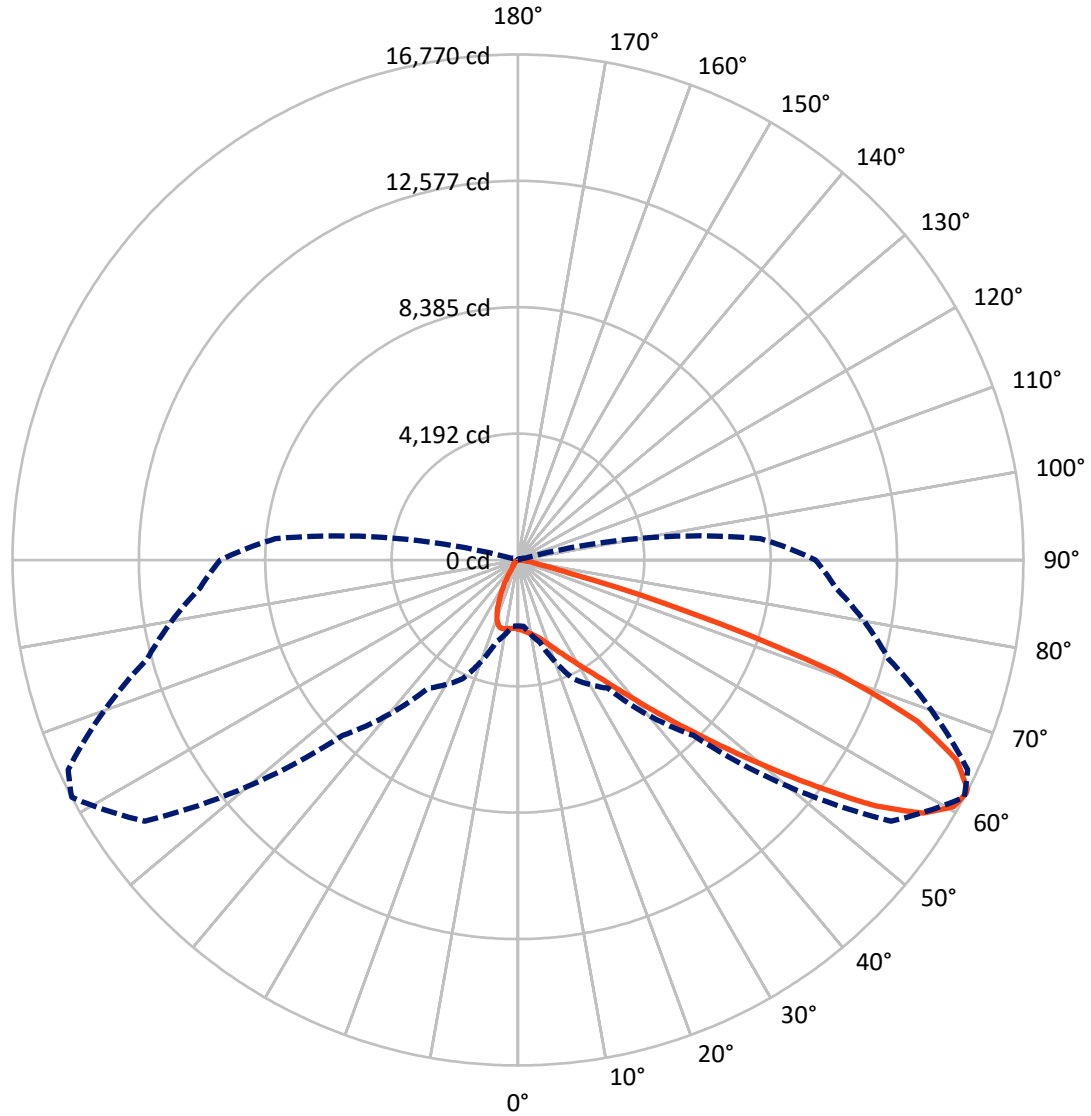
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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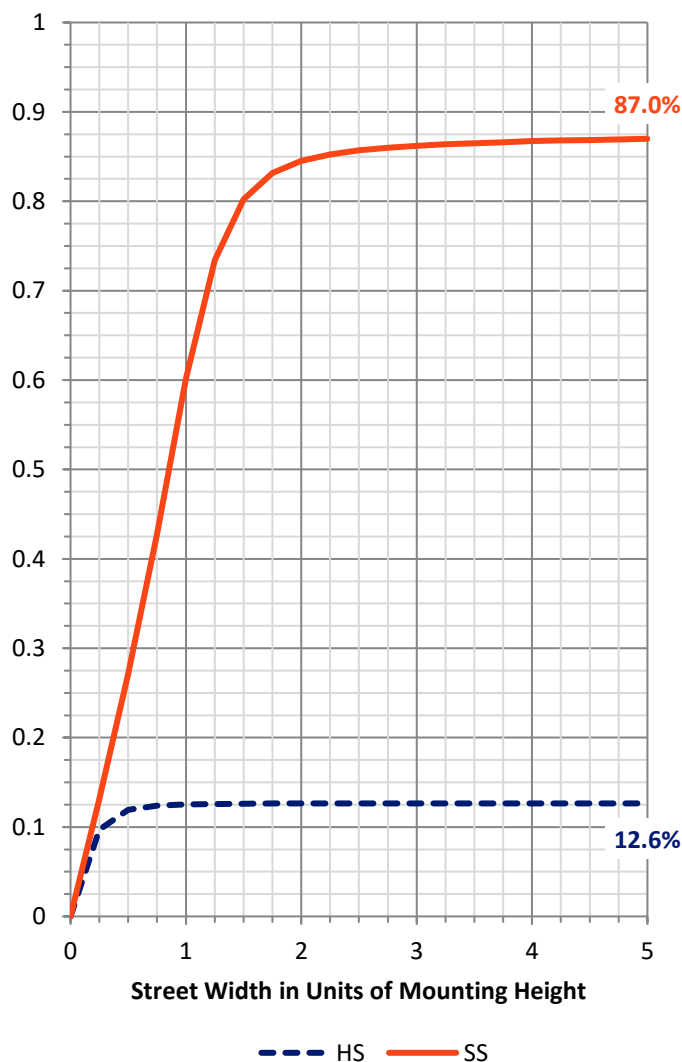
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2439.0	0.0	2439.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	16636.0	0.0	16636.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	19075.0	0.0	19075.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.1	1.2
10°-20°	617.5	3.2
20°-30°	1037.1	5.4
30°-40°	1988.0	10.4
40°-50°	4060.6	21.3
50°-60°	5373.5	28.2
60°-70°	4174.4	21.9
70°-80°	1506.7	7.9
80°-90°	96.0	0.5
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°	19075.0	100.0
0°-180°	19075.0	100.0

Coefficient of Utilization



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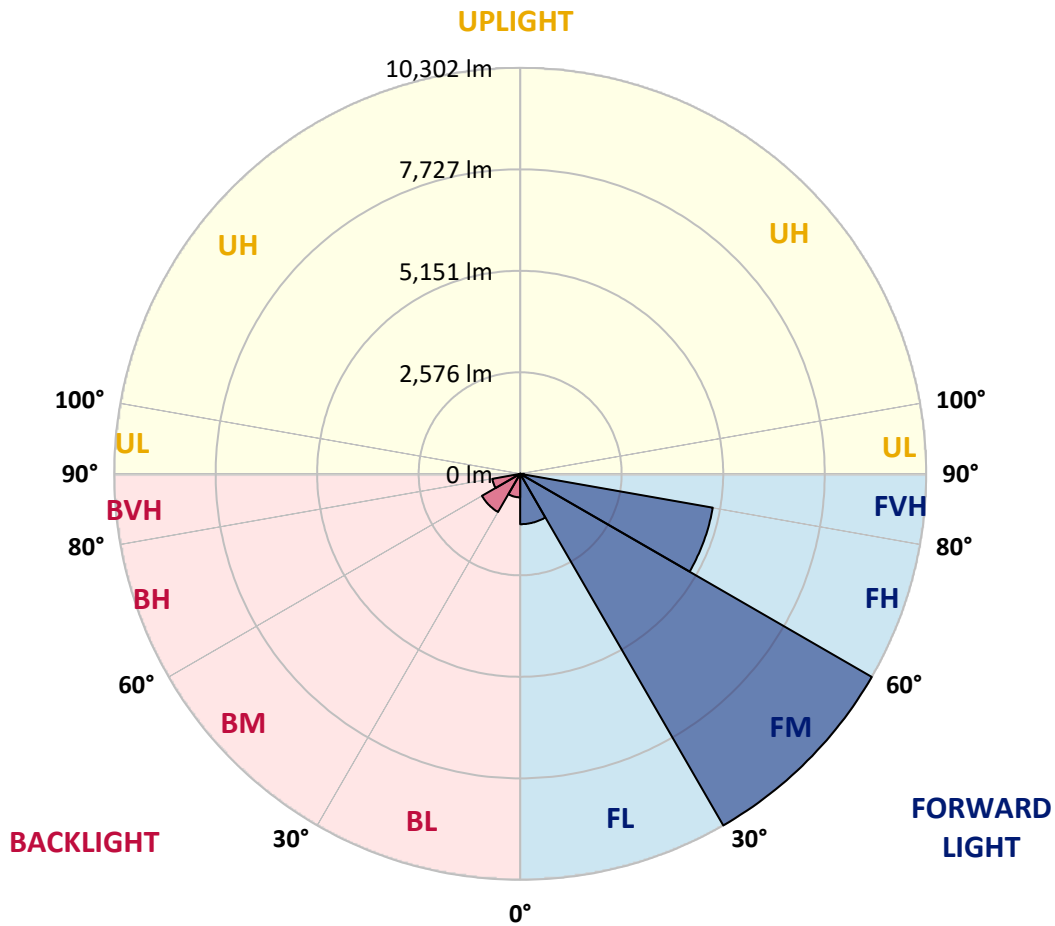
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1278.8	6.7			
FM (30°-60°)	10302.5	54.0			
FH (60°-80°)	4962.9	26.0			G2/5000
FVH (80°-90°)	91.8	0.5			G1/100
BL (0°-30°)	596.9	3.1	B2/1000		
BM (30°-60°)	1119.7	5.9	B2/2500		
BH (60°-80°)	718.2	3.8	B2/1000		G2/1000
BVH (80°-90°)	4.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8
2.5°	2358.8	2354.1	2349.4	2344.7	2344.7	2340.0	2335.3	2326.0	2316.6	2307.2	2302.5
5°	2401.0	2396.3	2391.6	2396.3	2391.6	2391.6	2386.9	2377.6	2368.2	2354.1	2340.0
7.5°	2433.8	2429.1	2424.4	2429.1	2433.8	2438.5	2443.2	2433.8	2429.1	2410.4	2396.3
10°	2476.0	2471.3	2466.7	2476.0	2476.0	2499.5	2504.2	2499.5	2494.8	2480.7	2457.3
12.5°	2537.0	2541.7	2541.7	2551.1	2560.4	2588.6	2598.0	2583.9	2583.9	2565.1	2537.0
15°	2649.5	2649.5	2649.5	2658.9	2663.6	2701.1	2710.5	2696.4	2705.8	2673.0	2644.9
17.5°	2757.4	2762.1	2771.5	2790.2	2790.2	2823.1	2841.8	2841.8	2860.6	2818.4	2780.8
20°	2865.3	2869.9	2884.0	2926.2	2926.2	2968.4	3001.3	3015.3	3034.1	2991.9	2926.2
22.5°	2982.5	2982.5	3005.9	3071.6	3057.5	3141.9	3202.9	3226.3	3245.1	3188.8	3085.7
25°	3160.7	3141.9	3160.7	3221.7	3212.3	3329.5	3442.1	3465.5	3489.0	3423.3	3268.5
27.5°	3498.3	3470.2	3404.5	3409.2	3409.2	3545.2	3704.7	3737.5	3751.6	3695.3	3503.0
30°	4173.6	4173.6	3929.8	3765.6	3657.8	3779.7	4004.8	4061.1	4079.8	3995.4	3742.2
32.5°	5350.7	5350.7	4900.5	4483.1	4075.1	4075.1	4333.1	4436.2	4455.0	4356.5	4061.1
35°	6851.3	6841.9	6166.6	5594.5	4797.3	4497.2	4717.6	4891.1	4947.4	4816.1	4473.7
37.5°	8445.7	8384.7	7657.9	7001.4	5908.7	5172.5	5238.1	5467.9	5519.5	5411.6	5008.3
40°	9740.0	9669.7	9083.5	8534.8	7343.7	6251.0	5988.4	6199.5	6260.4	6110.4	5646.1
42.5°	10912.4	10738.8	10335.6	9941.6	8994.4	8117.4	6987.3	7071.7	7137.3	6977.9	6363.6
45°	11761.2	11493.9	11287.5	11165.6	10663.8	10166.7	8281.6	8112.8	8136.2	7939.2	7146.7
47.5°	11784.6	11597.0	11615.8	11934.7	12141.0	12122.2	9965.1	9364.8	9275.7	8947.5	7981.5
50°	10659.1	10767.0	11109.3	12019.1	13135.2	13810.4	11967.5	10846.7	10579.4	9988.5	8811.5
52.5°	8783.3	8952.2	9594.6	11128.1	13280.5	14921.8	14044.9	12539.6	12061.3	11020.2	9449.2
55°	6879.4	6888.8	7564.1	9125.7	12309.8	15123.5	15705.0	14401.3	13669.8	11803.4	9871.3
57.5°	4731.7	4989.6	5847.7	6898.2	10119.8	14119.9	16328.7	15845.7	14903.1	12286.4	10166.7
60°	3099.7	3113.8	4112.7	5327.2	6888.8	11489.2	15948.8	16610.0	15901.9	12572.4	10368.4
62°	2185.3	2208.7	2827.7	4351.8	5191.2	8234.7	15109.4	16769.5	16464.7	12741.2	10579.4
62.5°	2025.8	2044.6	2565.1	4108.0	4877.0	7385.9	14809.3	16732.0	16549.1	12797.5	10654.4
65°	1486.6	1486.6	1678.8	2823.1	3573.4	3990.7	12549.0	15986.3	16436.5	13247.7	10935.8
67.5°	1148.9	1158.3	1223.9	1739.8	2696.4	2419.8	8009.6	14307.5	15264.2	13913.6	11095.2
70°	989.5	984.8	1031.7	1153.6	1946.1	1608.5	3526.5	11165.6	12783.5	13744.8	10949.9
72.5°	731.6	736.2	844.1	1012.9	1355.3	1045.7	1594.4	5927.5	8291.0	10757.6	9383.6
75°	468.9	473.6	595.6	797.2	975.4	684.7	919.1	1767.9	3395.2	5965.0	5739.9
77.5°	314.2	323.6	389.2	558.0	853.5	426.7	576.8	740.9	1022.3	2236.9	2058.7
80°	211.0	211.0	248.5	375.2	539.3	356.4	309.5	492.4	529.9	694.0	347.0
82.5°	140.7	140.7	164.1	248.5	351.7	318.9	187.6	267.3	309.5	347.0	121.9
85°	84.4	84.4	112.5	154.8	229.8	178.2	121.9	150.1	159.4	220.4	65.7
87.5°	51.6	46.9	75.0	107.9	121.9	107.9	79.7	79.7	84.4	121.9	32.8
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°	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8
2.5°	2293.1	2288.5	2283.8	2274.4	2260.3	2250.9	2241.6	2232.2	2222.8	2222.8	2236.9
5°	2335.3	2321.3	2302.5	2283.8	2255.6	2236.9	2222.8	2204.0	2194.7	2194.7	2199.4
7.5°	2386.9	2372.9	2340.0	2307.2	2265.0	2232.2	2199.4	2157.1	2124.3	2110.3	2124.3
10°	2443.2	2424.4	2377.6	2326.0	2279.1	2194.7	2086.8	1955.5	1843.0	1791.4	1814.8
12.5°	2513.5	2490.1	2433.8	2363.5	2255.6	2049.3	1782.0	1477.2	1284.9	1195.8	1214.6
15°	2616.7	2583.9	2504.2	2396.3	2157.1	1711.7	1275.5	923.8	745.6	670.6	680.0
17.5°	2738.6	2696.4	2588.6	2386.9	1903.9	1233.3	759.7	539.3	464.3	445.5	445.5
20°	2869.9	2813.7	2673.0	2316.6	1519.4	773.8	473.6	412.7	384.5	370.5	370.5
22.5°	3005.9	2930.9	2743.3	2152.5	1083.3	483.0	389.2	347.0	314.2	300.1	300.1
25°	3170.1	3071.6	2813.7	1866.4	689.3	389.2	333.0	290.7	257.9	239.2	243.9
27.5°	3362.3	3235.7	2874.6	1510.0	445.5	337.6	276.7	234.5	206.3	197.0	197.0
30°	3564.0	3413.9	2888.7	1130.2	361.1	290.7	229.8	192.3	173.5	164.1	164.1
32.5°	3840.7	3643.7	2846.5	750.3	304.8	243.9	192.3	159.4	145.4	140.7	140.7
35°	4206.4	3943.8	2748.0	464.3	257.9	201.6	159.4	140.7	126.6	121.9	121.9
37.5°	4670.7	4361.2	2574.5	318.9	220.4	164.1	136.0	121.9	112.5	107.9	107.9
40°	5289.7	4867.7	2349.4	276.7	187.6	140.7	117.2	107.9	98.5	98.5	98.5
42.5°	5946.2	5482.0	2058.7	243.9	159.4	121.9	103.2	93.8	89.1	84.4	84.4
45°	6663.7	6110.4	1697.6	215.7	136.0	107.9	93.8	79.7	75.0	75.0	75.0
47.5°	7376.5	6757.5	1303.7	187.6	117.2	93.8	79.7	70.3	65.7	61.0	61.0
50°	8108.1	7343.7	956.6	164.1	103.2	84.4	70.3	61.0	51.6	46.9	46.9
52.5°	8638.0	7695.4	698.7	140.7	89.1	70.3	56.3	46.9	37.5	32.8	32.8
55°	9027.2	7911.1	511.2	117.2	79.7	61.0	46.9	37.5	28.1	28.1	23.4
57.5°	9332.0	8014.3	384.5	103.2	70.3	51.6	37.5	28.1	23.4	18.8	18.8
60°	9566.5	8019.0	286.1	84.4	61.0	42.2	28.1	18.8	14.1	14.1	14.1
62°	9876.0	8079.9	234.5	70.3	56.3	37.5	23.4	14.1	9.4	4.7	4.7
62.5°	9965.1	8103.4	225.1	70.3	51.6	32.8	18.8	14.1	9.4	4.7	4.7
65°	10377.8	8145.6	173.5	56.3	42.2	28.1	14.1	9.4	0.0	0.0	0.0
67.5°	10752.9	8079.9	126.6	42.2	32.8	18.8	14.1	4.7	0.0	0.0	0.0
70°	10715.4	7629.7	89.1	28.1	23.4	14.1	9.4	0.0	0.0	0.0	0.0
72.5°	8830.2	5711.8	61.0	23.4	14.1	9.4	4.7	0.0	0.0	0.0	0.0
75°	5331.9	2499.5	42.2	14.1	14.1	9.4	4.7	0.0	0.0	0.0	0.0
77.5°	1749.2	905.1	28.1	9.4	9.4	4.7	4.7	0.0	0.0	0.0	0.0
80°	286.1	150.1	14.1	9.4	9.4	4.7	4.7	0.0	0.0	0.0	0.0
82.5°	89.1	37.5	9.4	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0
85°	32.8	14.1	9.4	9.4	4.7	4.7	0.0	0.0	0.0	0.0	0.0
87.5°	14.1	9.4	9.4	9.4	4.7	4.7	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)