

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: P237470

Luminaire Tested: **ARCH-L-AF72-170-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15846 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

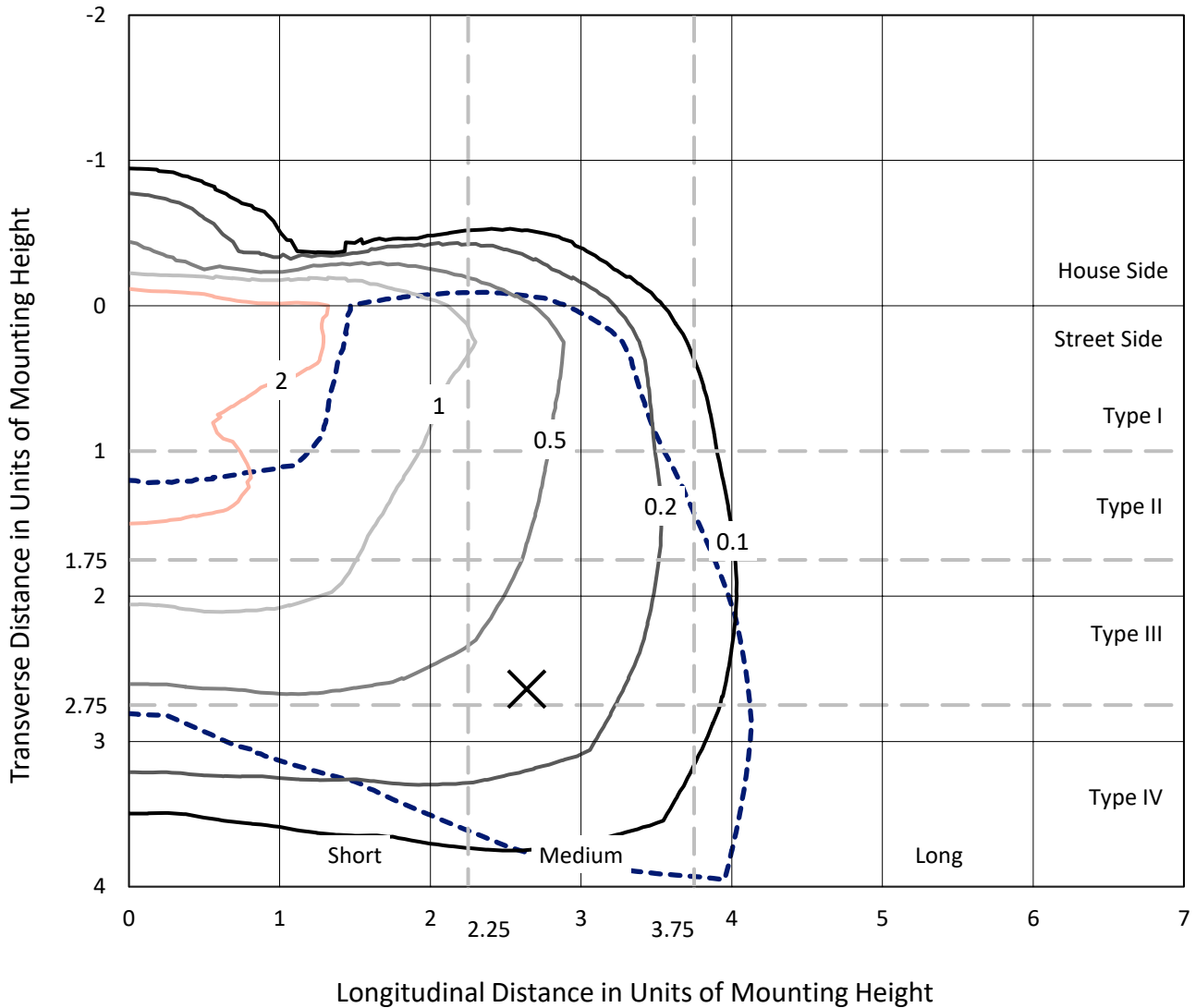
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

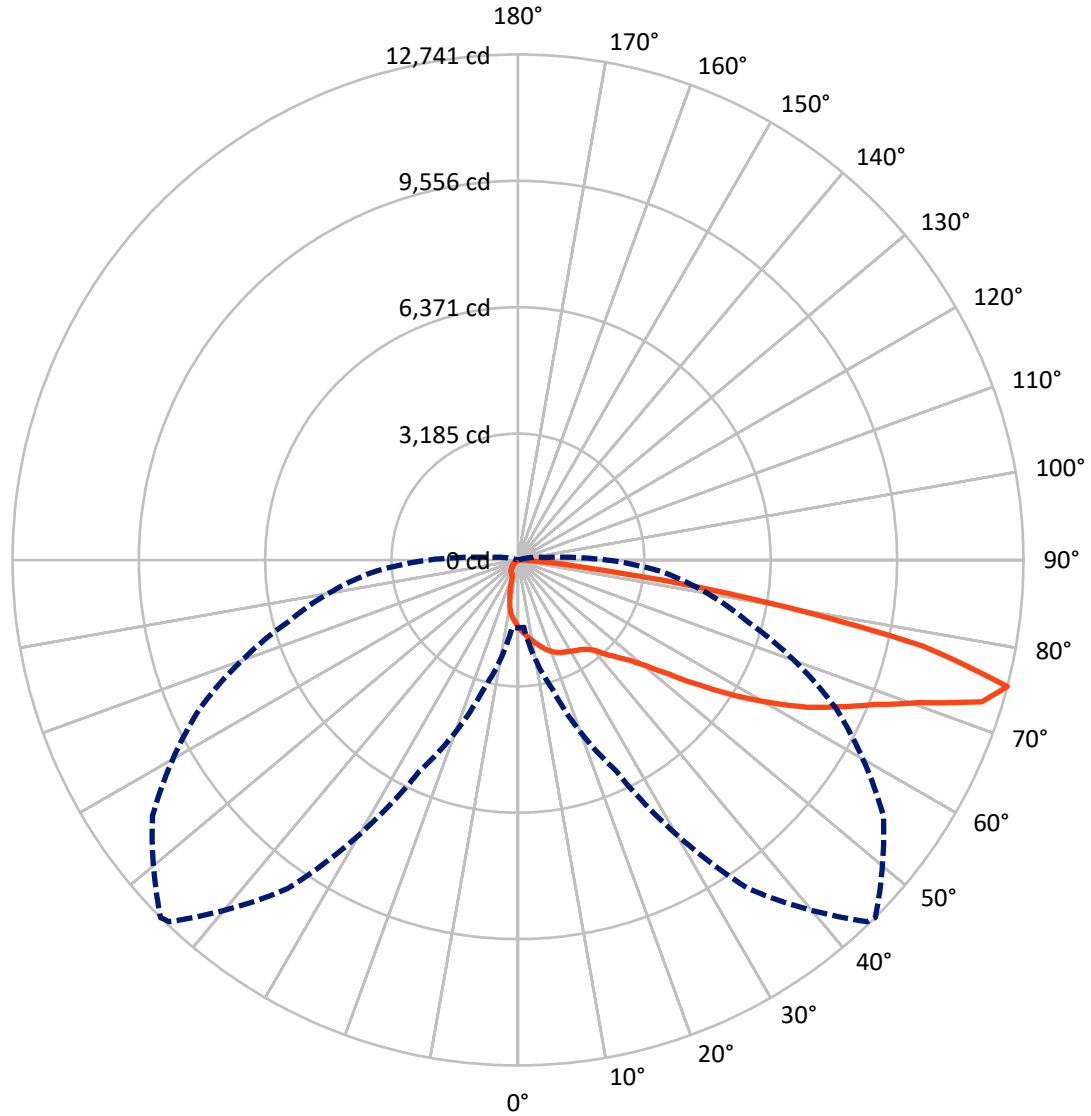
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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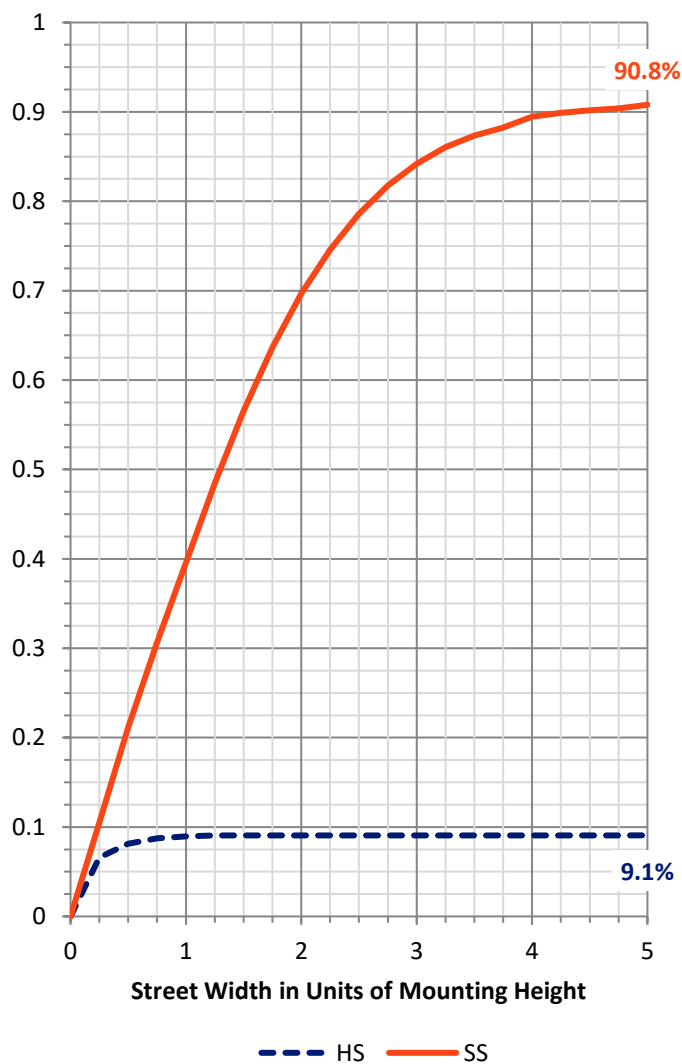
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1449.4	0.0	1449.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	14396.6	0.0	14396.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	15846.0	0.0	15846.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.9	1.0
10°-20°	453.2	2.9
20°-30°	750.5	4.7
30°-40°	1086.1	6.9
40°-50°	1778.5	11.2
50°-60°	3168.9	20.0
60°-70°	4658.7	29.4
70°-80°	3514.5	22.2
80°-90°	275.7	1.7
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°	15846.0	100.0
0°-180°	15846.0	100.0

Coefficient of Utilization



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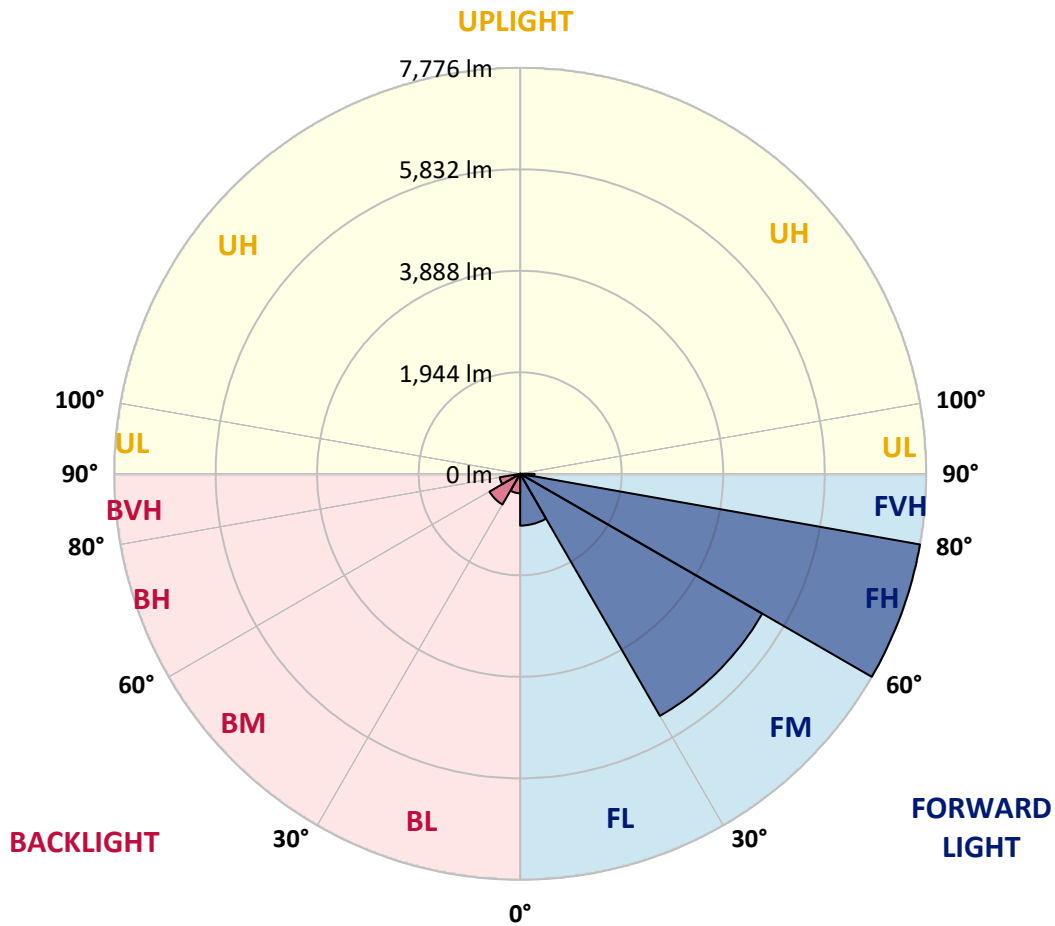
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	991.1	6.3			
FM (30°-60°)	5354.3	33.8			
FH (60°-80°)	7776.2	49.1			G4/12000
FVH (80°-90°)	275.0	1.7			G3/500
BL (0°-30°)	372.5	2.4	B1/500		
BM (30°-60°)	679.2	4.3	B1/1000		
BH (60°-80°)	397.0	2.5	B1/500		G1/500
BVH (80°-90°)	0.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8
2.5°	1841.0	1841.0	1837.3	1833.6	1814.8	1796.1	1792.3	1781.1	1747.3	1724.8	1702.3
5°	1994.8	1998.5	1991.0	1972.3	1931.0	1889.8	1886.0	1856.0	1792.3	1747.3	1698.6
7.5°	2141.0	2148.5	2129.8	2096.0	2047.3	1987.3	1983.5	1927.3	1844.8	1781.1	1709.8
10°	2264.8	2264.8	2238.5	2197.3	2144.8	2081.0	2073.5	2009.8	1916.0	1837.3	1743.6
12.5°	2399.7	2396.0	2358.5	2302.2	2242.3	2182.3	2178.5	2099.8	2009.8	1908.5	1792.3
15°	2523.5	2516.0	2467.2	2414.7	2351.0	2287.3	2283.5	2204.8	2111.0	1991.0	1863.5
17.5°	2591.0	2587.2	2542.2	2489.7	2437.2	2388.5	2384.7	2302.2	2201.0	2077.3	1934.8
20°	2602.2	2606.0	2568.5	2523.5	2493.5	2467.2	2467.2	2392.2	2283.5	2152.3	2009.8
22.5°	2606.0	2617.2	2591.0	2531.0	2523.5	2527.2	2534.7	2474.7	2362.2	2238.5	2088.5
25°	2632.2	2647.2	2628.5	2557.2	2549.7	2576.0	2583.5	2557.2	2456.0	2332.2	2178.5
27.5°	2684.7	2699.7	2684.7	2594.7	2583.5	2609.7	2617.2	2632.2	2557.2	2422.2	2272.3
30°	2789.7	2793.4	2759.7	2647.2	2624.7	2658.5	2669.7	2711.0	2651.0	2508.5	2362.2
32.5°	2973.4	2935.9	2834.7	2684.7	2666.0	2703.5	2714.7	2759.7	2737.2	2591.0	2456.0
35°	3348.4	3153.4	2920.9	2737.2	2718.5	2756.0	2770.9	2834.7	2845.9	2707.2	2572.2
37.5°	3344.6	3168.4	3123.4	2838.4	2812.2	2838.4	2857.2	2935.9	2980.9	2860.9	2741.0
40°	3580.9	3505.9	3505.9	3029.7	2943.4	2980.9	2999.7	3078.4	3157.2	3063.4	2939.7
42.5°	4323.3	4274.5	4222.0	3397.1	3127.2	3232.1	3243.4	3292.1	3385.9	3355.9	3209.7
45°	5151.9	5106.9	4904.5	4019.6	3442.1	3460.9	3487.1	3565.9	3700.8	3757.1	3584.6
47.5°	5800.6	5755.6	5583.1	4769.5	3933.3	3768.3	3768.3	3922.1	4132.1	4274.5	4109.6
50°	6321.8	6269.3	6164.3	5568.1	4739.5	4210.8	4188.3	4368.3	4679.5	4900.7	4788.2
52.5°	6828.0	6674.3	6610.5	6393.1	5650.6	4852.0	4792.0	4919.5	5350.7	5624.4	5530.6
55°	7165.5	7143.0	7075.5	7150.5	6606.8	5631.9	5579.4	5605.6	6145.6	6329.3	6213.1
57.5°	7480.4	7476.7	7626.7	7975.4	7649.2	6524.3	6441.8	6400.6	6914.2	6869.3	6970.5
60°	7870.4	7802.9	8151.6	8650.3	8605.3	7394.2	7300.5	7218.0	7502.9	7375.4	7877.9
62.5°	7889.1	7870.4	8579.1	9295.2	9554.0	8279.1	8170.4	7874.1	8016.6	7870.4	8744.0
65°	7173.0	7266.7	8759.0	9636.5	10348.9	9055.3	8924.0	8462.8	8474.1	8376.6	9763.9
67.5°	7011.7	7060.5	8264.1	10003.9	10922.6	9838.9	9715.2	9141.5	9006.5	9014.0	10367.6
70°	6610.5	6685.5	7649.2	9977.7	11376.3	10885.1	10761.3	10138.9	9812.7	9449.0	9902.7
72.5°	5050.7	5178.2	6445.5	8747.8	11252.5	12253.7	12219.9	11402.5	10135.1	8676.6	7491.7
75°	1709.8	1706.1	3385.9	5875.6	10108.9	12673.6	12741.1	11245.0	8841.5	5984.3	3719.6
77.5°	367.5	371.2	697.4	2381.0	6715.5	10176.4	10435.1	8481.6	5703.1	2666.0	851.2
80°	180.0	183.7	288.7	629.9	2684.7	5706.9	6111.8	4360.8	2107.3	532.4	142.5
82.5°	90.0	93.7	150.0	333.7	993.6	2028.5	2167.3	1604.8	603.7	300.0	71.2
85°	33.7	33.7	75.0	198.7	453.7	476.2	584.9	464.9	363.7	243.7	18.7
87.5°	7.5	7.5	41.2	97.5	202.5	150.0	150.0	142.5	221.2	165.0	7.5
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°	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8	1694.8
2.5°	1691.1	1676.1	1649.8	1623.6	1604.8	1582.3	1571.1	1559.8	1556.1	1552.3	1559.8
5°	1672.3	1649.8	1601.1	1559.8	1522.3	1492.3	1469.8	1447.3	1436.1	1428.6	1432.3
7.5°	1672.3	1638.6	1567.3	1503.6	1443.6	1379.8	1316.1	1267.4	1229.9	1207.4	1211.1
10°	1691.1	1646.1	1552.3	1466.1	1353.6	1218.6	1079.9	974.9	903.7	862.4	862.4
12.5°	1732.3	1672.3	1556.1	1421.1	1229.9	993.6	783.7	656.2	603.7	573.7	577.4
15°	1788.6	1717.3	1574.8	1361.1	1057.4	738.7	547.4	464.9	464.9	472.4	476.2
17.5°	1852.3	1773.6	1589.8	1271.1	836.2	528.7	431.2	423.7	435.0	453.7	453.7
20°	1916.0	1829.8	1597.3	1128.6	626.2	420.0	408.7	408.7	416.2	435.0	438.7
22.5°	1994.8	1901.0	1589.8	952.4	468.7	397.5	393.7	393.7	393.7	416.2	416.2
25°	2077.3	1983.5	1559.8	764.9	397.5	382.5	378.7	375.0	375.0	393.7	397.5
27.5°	2171.0	2069.8	1488.6	584.9	375.0	367.5	363.7	356.2	356.2	371.2	371.2
30°	2264.8	2167.3	1379.8	442.5	356.2	352.5	345.0	337.5	330.0	345.0	345.0
32.5°	2366.0	2268.5	1237.4	352.5	330.0	330.0	326.2	315.0	307.5	315.0	318.7
35°	2501.0	2384.7	1076.1	307.5	296.2	296.2	296.2	292.5	277.5	285.0	285.0
37.5°	2681.0	2546.0	888.7	285.0	270.0	262.5	262.5	262.5	251.2	255.0	255.0
40°	2909.7	2733.5	708.7	266.2	251.2	232.5	225.0	228.7	221.2	221.2	217.5
42.5°	3220.9	2935.9	532.4	251.2	236.2	210.0	195.0	191.2	183.7	180.0	180.0
45°	3667.1	3183.4	382.5	236.2	225.0	183.7	168.7	157.5	138.7	127.5	127.5
47.5°	4244.5	3464.6	285.0	221.2	213.7	161.2	142.5	120.0	93.7	86.2	86.2
50°	4949.5	3779.6	240.0	198.7	195.0	142.5	112.5	78.7	52.5	45.0	48.7
52.5°	5635.6	4075.8	213.7	176.2	172.5	123.7	82.5	41.2	22.5	22.5	22.5
55°	6213.1	4285.8	195.0	157.5	150.0	97.5	45.0	18.7	11.2	11.2	11.2
57.5°	6734.3	4405.8	176.2	138.7	120.0	67.5	18.7	7.5	7.5	3.7	3.7
60°	7210.5	4477.0	153.7	120.0	93.7	37.5	7.5	3.7	3.7	0.0	0.0
62.5°	7679.2	4529.5	131.2	97.5	71.2	15.0	3.7	3.7	0.0	0.0	0.0
65°	8035.4	4510.8	105.0	78.7	45.0	7.5	3.7	0.0	0.0	0.0	0.0
67.5°	8024.1	4255.8	78.7	60.0	22.5	3.7	0.0	0.0	0.0	0.0	0.0
70°	7176.7	3584.6	52.5	37.5	7.5	3.7	0.0	0.0	0.0	0.0	0.0
72.5°	5091.9	2298.5	33.7	22.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	2242.3	697.4	18.7	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	438.7	161.2	11.2	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	105.0	18.7	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	3.7	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)