

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: P237435

Luminaire Tested: **ARCH-L-AF72-220-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-220-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 945mA 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: 18162.1 lumens
Efficiency: N/A
Efficacy: 81.8 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

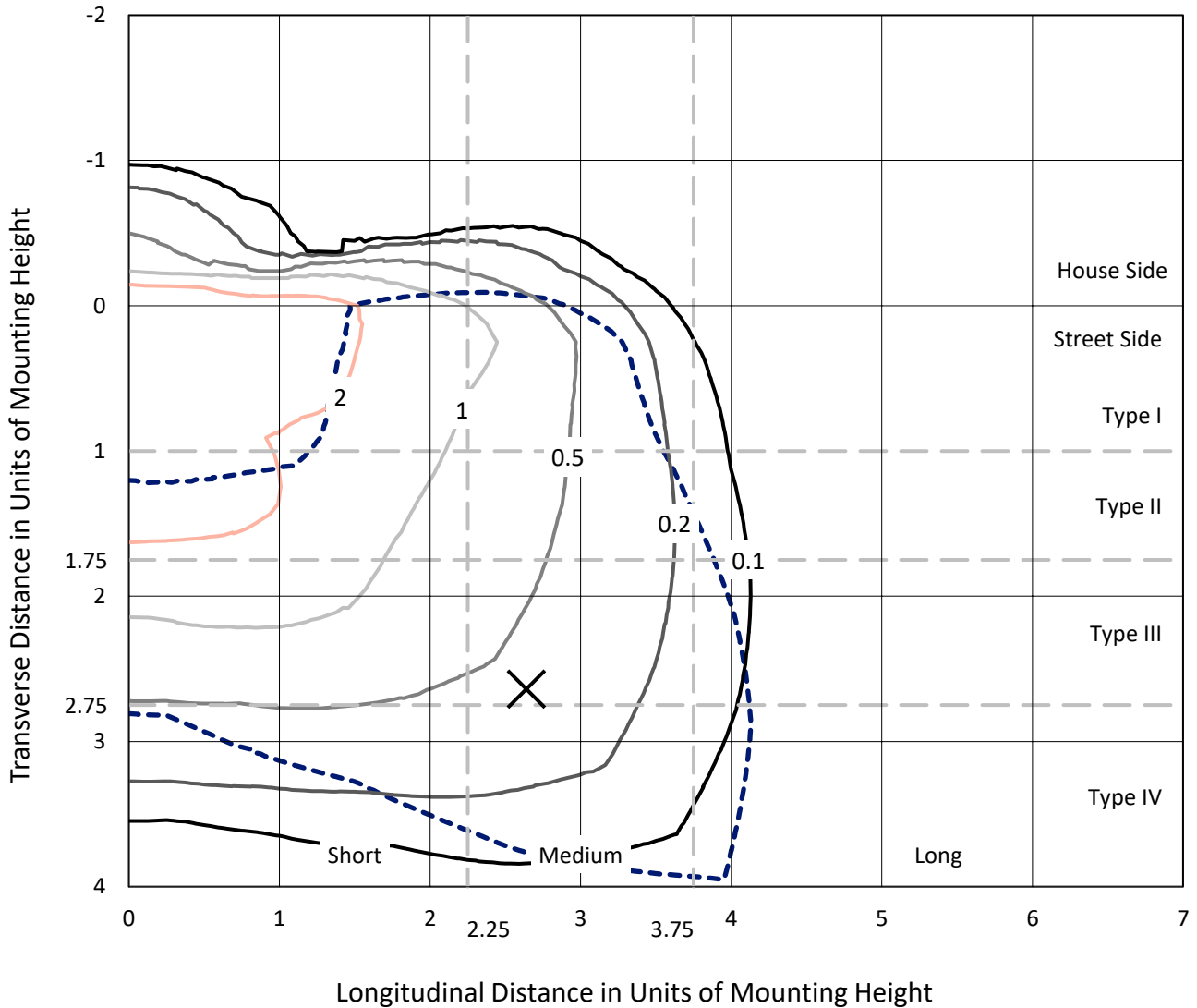
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

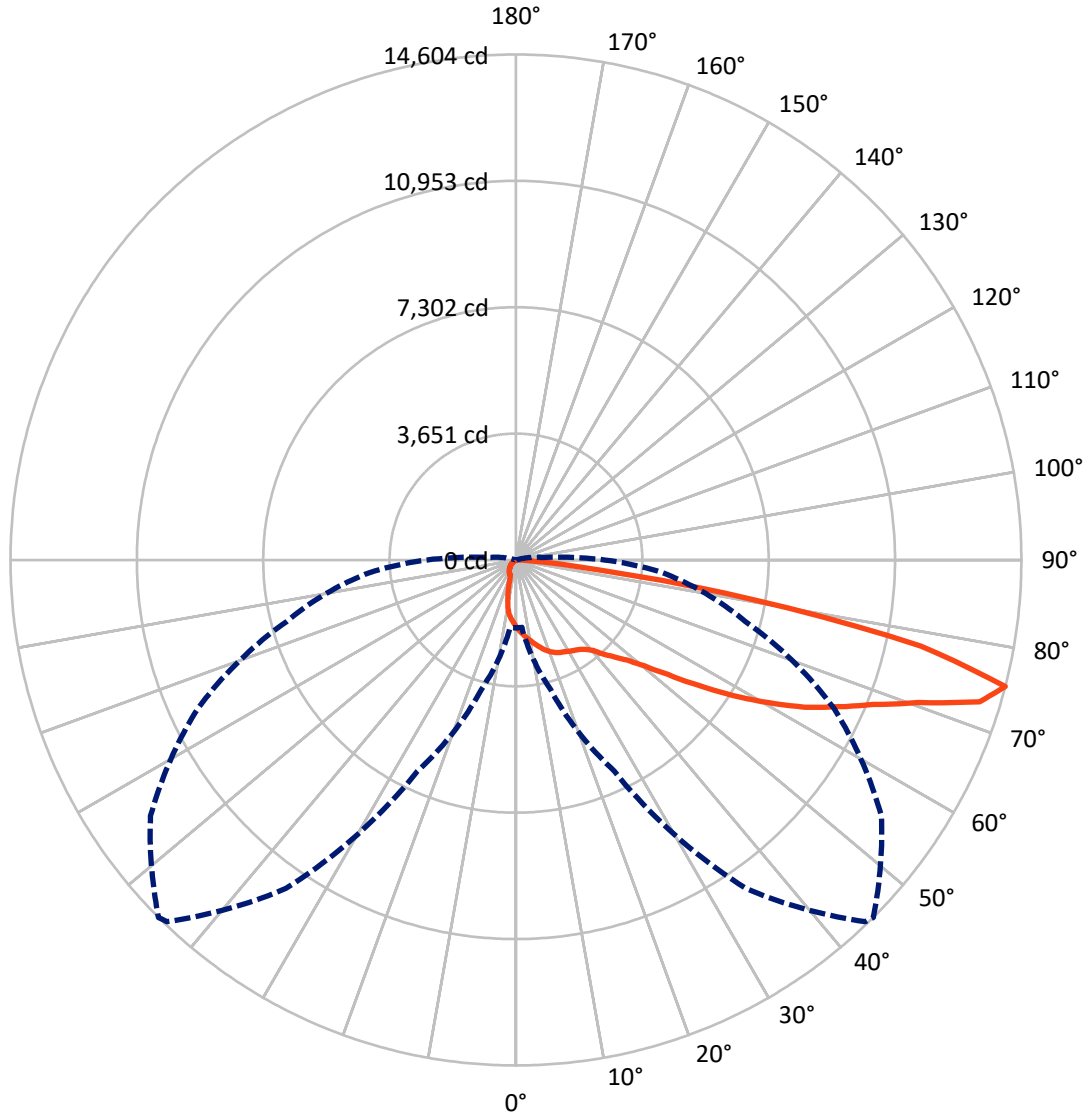
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 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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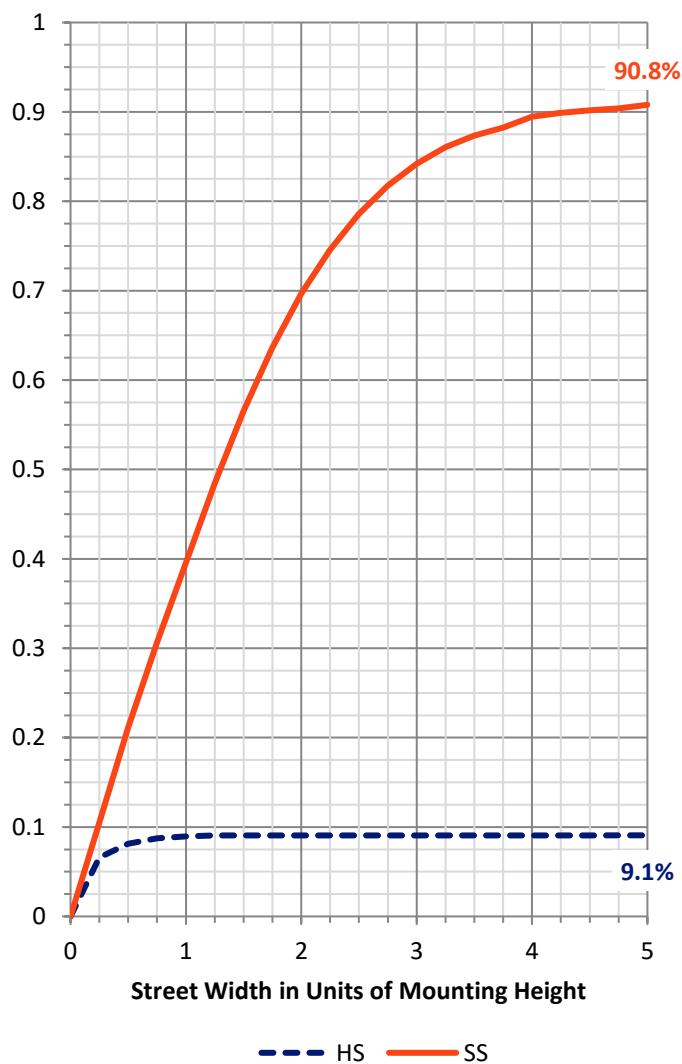
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1661.3	0.0	1661.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	16500.9	0.0	16500.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	18162.1	0.0	18162.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.3	1.0
10°-20°	519.4	2.9
20°-30°	860.2	4.7
30°-40°	1244.9	6.9
40°-50°	2038.4	11.2
50°-60°	3632.1	20.0
60°-70°	5339.6	29.4
70°-80°	4028.2	22.2
80°-90°	316.0	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°	18162.1	100.0
0°-180°	18162.1	100.0

Coefficient of Utilization



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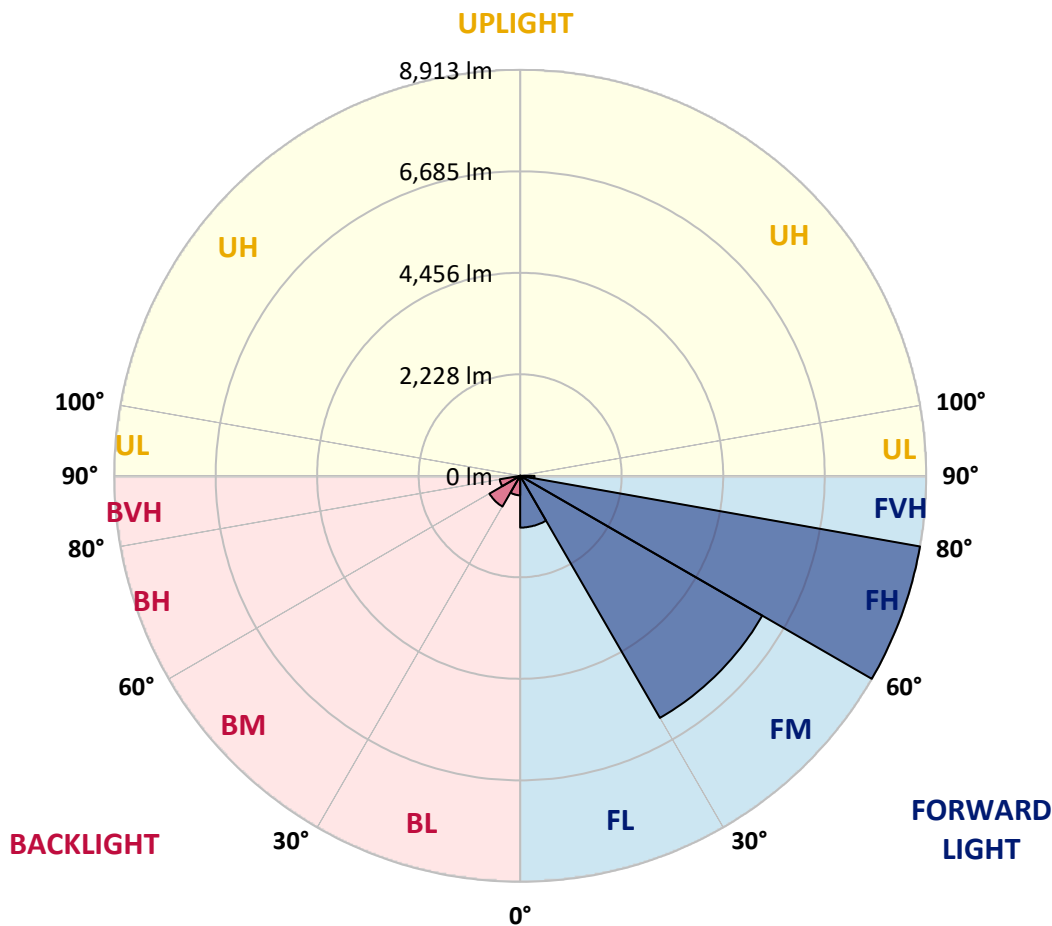
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1136.0	6.3			
FM (30°-60°)	6136.9	33.8			
FH (60°-80°)	8912.8	49.1			G4/12000
FVH (80°-90°)	315.2	1.7			G3/500
BL (0°-30°)	426.9	2.4	B1/500		
BM (30°-60°)	778.5	4.3	B1/1000		
BH (60°-80°)	455.0	2.5	B1/500		G1/500
BVH (80°-90°)	0.9	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°	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5
2.5°	2110.2	2110.2	2105.9	2101.6	2080.1	2058.6	2054.3	2041.4	2002.7	1976.9	1951.2
5°	2286.4	2290.6	2282.1	2260.6	2213.3	2166.1	2161.7	2127.4	2054.3	2002.7	1946.9
7.5°	2454.0	2462.6	2441.1	2402.4	2346.6	2277.7	2273.4	2209.0	2114.5	2041.4	1959.8
10°	2595.8	2595.8	2565.7	2518.4	2458.3	2385.2	2376.6	2303.5	2196.1	2105.9	1998.5
12.5°	2750.5	2746.2	2703.2	2638.7	2570.0	2501.3	2496.9	2406.7	2303.5	2187.5	2054.3
15°	2892.3	2883.7	2827.8	2767.6	2694.7	2621.5	2617.3	2527.0	2419.5	2282.1	2135.9
17.5°	2969.6	2965.4	2913.8	2853.7	2793.4	2737.6	2733.3	2638.7	2522.7	2380.9	2217.6
20°	2982.6	2986.8	2943.9	2892.3	2857.9	2827.8	2827.8	2741.9	2617.3	2466.8	2303.5
22.5°	2986.8	2999.7	2969.6	2901.0	2892.3	2896.6	2905.2	2836.5	2707.6	2565.7	2393.8
25°	3016.9	3034.1	3012.6	2931.0	2922.3	2952.5	2961.0	2931.0	2814.9	2673.1	2496.9
27.5°	3077.2	3094.3	3077.2	2973.9	2961.0	2991.2	2999.7	3016.9	2931.0	2776.3	2604.4
30°	3197.5	3201.8	3163.0	3034.1	3008.4	3047.0	3060.0	3107.3	3038.4	2875.1	2707.6
32.5°	3408.1	3365.0	3249.1	3077.2	3055.7	3098.6	3111.4	3163.0	3137.3	2969.6	2814.9
35°	3837.8	3614.3	3347.9	3137.3	3115.8	3158.8	3175.9	3249.1	3261.9	3103.0	2948.2
37.5°	3833.5	3631.6	3580.0	3253.3	3223.2	3253.3	3274.8	3365.0	3416.6	3279.1	3141.6
40°	4104.3	4018.3	4018.3	3472.5	3373.7	3416.6	3438.2	3528.4	3618.6	3511.1	3369.3
42.5°	4955.2	4899.3	4839.2	3893.7	3584.2	3704.6	3717.4	3773.4	3880.8	3846.4	3678.8
45°	5905.0	5853.4	5621.4	4607.1	3945.3	3966.7	3996.8	4087.1	4241.8	4306.2	4108.5
47.5°	6648.4	6596.8	6399.2	5466.6	4508.2	4319.1	4319.1	4495.4	4736.1	4899.3	4710.2
50°	7245.8	7185.7	7065.4	6382.1	5432.3	4826.3	4800.6	5006.8	5363.4	5617.0	5488.1
52.5°	7826.0	7649.8	7576.8	7327.5	6476.6	5561.2	5492.5	5638.6	6132.7	6446.6	6339.0
55°	8212.8	8187.1	8109.7	8195.6	7572.4	6455.0	6395.0	6425.0	7043.8	7254.5	7121.2
57.5°	8573.8	8569.5	8741.4	9141.1	8767.2	7477.9	7383.4	7336.1	7924.9	7873.3	7989.4
60°	9020.8	8943.4	9343.1	9914.7	9863.2	8475.0	8367.5	8273.0	8599.6	8453.5	9029.4
62.5°	9042.3	9020.8	9833.0	10653.9	10950.4	9489.2	9364.6	9025.1	9188.3	9020.8	10022.2
65°	8221.4	8328.9	10039.3	11045.0	11861.5	10378.9	10228.5	9699.8	9712.7	9600.9	11191.1
67.5°	8036.7	8092.5	9472.0	11466.1	12519.0	11277.0	11135.2	10477.8	10323.0	10331.5	11883.0
70°	7576.8	7662.7	8767.2	11436.0	13039.1	12476.1	12334.3	11621.0	11246.9	10830.1	11350.1
72.5°	5789.0	5935.1	7387.7	10026.4	12897.3	14044.7	14006.1	13069.1	11616.6	9944.8	8586.6
75°	1959.8	1955.4	3880.8	6734.4	11586.5	14526.1	14603.5	12888.7	10133.9	6859.1	4263.3
77.5°	421.2	425.4	799.3	2729.0	7697.1	11663.9	11960.4	9721.4	6536.8	3055.7	975.5
80°	206.3	210.6	330.9	721.9	3077.2	6541.1	7005.1	4998.2	2415.2	610.3	163.4
82.5°	103.1	107.4	171.9	382.5	1138.9	2325.0	2484.0	1839.4	691.9	343.8	81.6
85°	38.7	38.7	86.0	227.8	520.0	545.8	670.5	532.8	416.9	279.3	21.6
87.5°	8.6	8.6	47.3	111.8	232.0	171.9	171.9	163.4	253.6	189.1	8.6
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°	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5	1942.5
2.5°	1938.3	1921.1	1891.0	1860.9	1839.4	1813.6	1800.7	1787.8	1783.5	1779.2	1787.8
5°	1916.7	1891.0	1835.1	1787.8	1744.9	1710.5	1684.7	1658.9	1646.0	1637.4	1641.7
7.5°	1916.7	1878.0	1796.4	1723.3	1654.6	1581.5	1508.5	1452.6	1409.7	1383.9	1388.1
10°	1938.3	1886.7	1779.2	1680.4	1551.5	1396.8	1237.7	1117.4	1035.8	988.5	988.5
12.5°	1985.6	1916.7	1783.5	1628.8	1409.7	1138.9	898.2	752.1	691.9	657.5	661.9
15°	2050.0	1968.3	1805.0	1560.0	1211.9	846.6	627.4	532.8	532.8	541.5	545.8
17.5°	2123.0	2032.8	1822.2	1456.9	958.4	606.0	494.2	485.6	498.6	520.0	520.0
20°	2196.1	2097.2	1830.8	1293.6	717.8	481.3	468.4	468.4	477.0	498.6	502.8
22.5°	2286.4	2178.9	1822.2	1091.6	537.2	455.5	451.2	451.2	451.2	477.0	477.0
25°	2380.9	2273.4	1787.8	876.7	455.5	438.3	434.1	429.7	429.7	451.2	455.5
27.5°	2488.4	2372.3	1706.2	670.5	429.7	421.2	416.9	408.3	408.3	425.4	425.4
30°	2595.8	2484.0	1581.5	507.1	408.3	403.9	395.4	386.8	378.1	395.4	395.4
32.5°	2711.9	2600.1	1418.1	403.9	378.1	378.1	373.8	361.0	352.4	361.0	365.3
35°	2866.5	2733.3	1233.4	352.4	339.5	339.5	339.5	335.2	318.1	326.5	326.5
37.5°	3072.8	2918.1	1018.6	326.5	309.4	300.8	300.8	300.8	287.9	292.3	292.3
40°	3335.0	3133.0	812.3	305.2	287.9	266.5	257.9	262.1	253.6	253.6	249.2
42.5°	3691.7	3365.0	610.3	287.9	270.8	240.7	223.4	219.2	210.6	206.3	206.3
45°	4203.1	3648.7	438.3	270.8	257.9	210.6	193.4	180.5	159.0	146.1	146.1
47.5°	4865.0	3971.0	326.5	253.6	245.0	184.7	163.4	137.5	107.4	98.9	98.9
50°	5673.0	4332.0	275.0	227.8	223.4	163.4	128.9	90.2	60.2	51.6	55.8
52.5°	6459.4	4671.6	245.0	202.0	197.6	141.8	94.5	47.3	25.7	25.7	25.7
55°	7121.2	4912.2	223.4	180.5	171.9	111.8	51.6	21.6	12.9	12.9	12.9
57.5°	7718.6	5049.8	202.0	159.0	137.5	77.3	21.6	8.6	8.6	4.3	4.3
60°	8264.4	5131.4	176.2	137.5	107.4	42.9	8.6	4.3	4.3	0.0	0.0
62.5°	8801.6	5191.6	150.4	111.8	81.6	17.2	4.3	4.3	0.0	0.0	0.0
65°	9209.9	5170.0	120.3	90.2	51.6	8.6	4.3	0.0	0.0	0.0	0.0
67.5°	9197.0	4877.9	90.2	68.8	25.7	4.3	0.0	0.0	0.0	0.0	0.0
70°	8225.7	4108.5	60.2	42.9	8.6	4.3	0.0	0.0	0.0	0.0	0.0
72.5°	5836.2	2634.5	38.7	25.7	4.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	2570.0	799.3	21.6	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	502.8	184.7	12.9	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	120.3	21.6	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	51.6	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.6	4.3	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)