

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: P236997

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236997
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22030 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

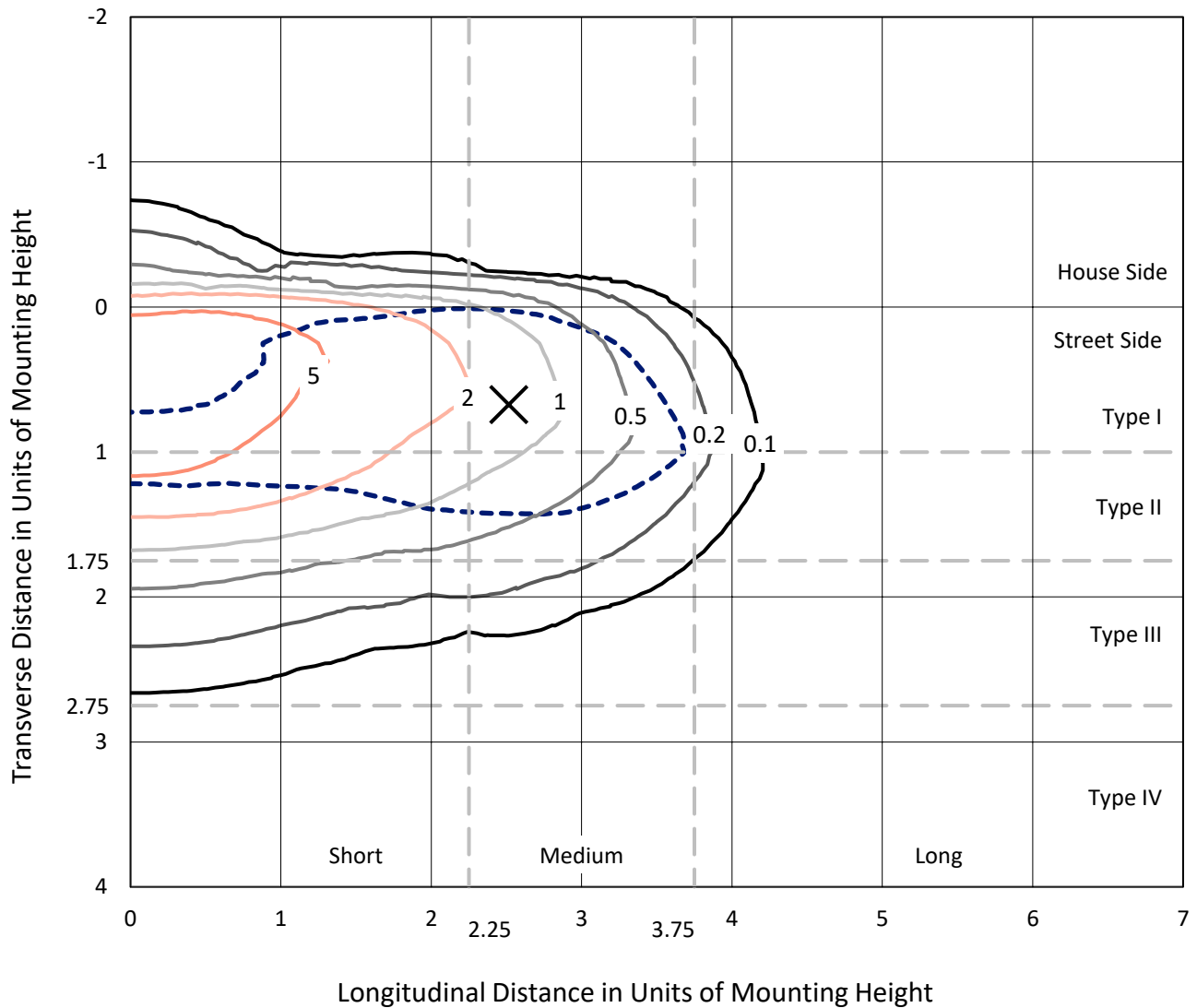
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

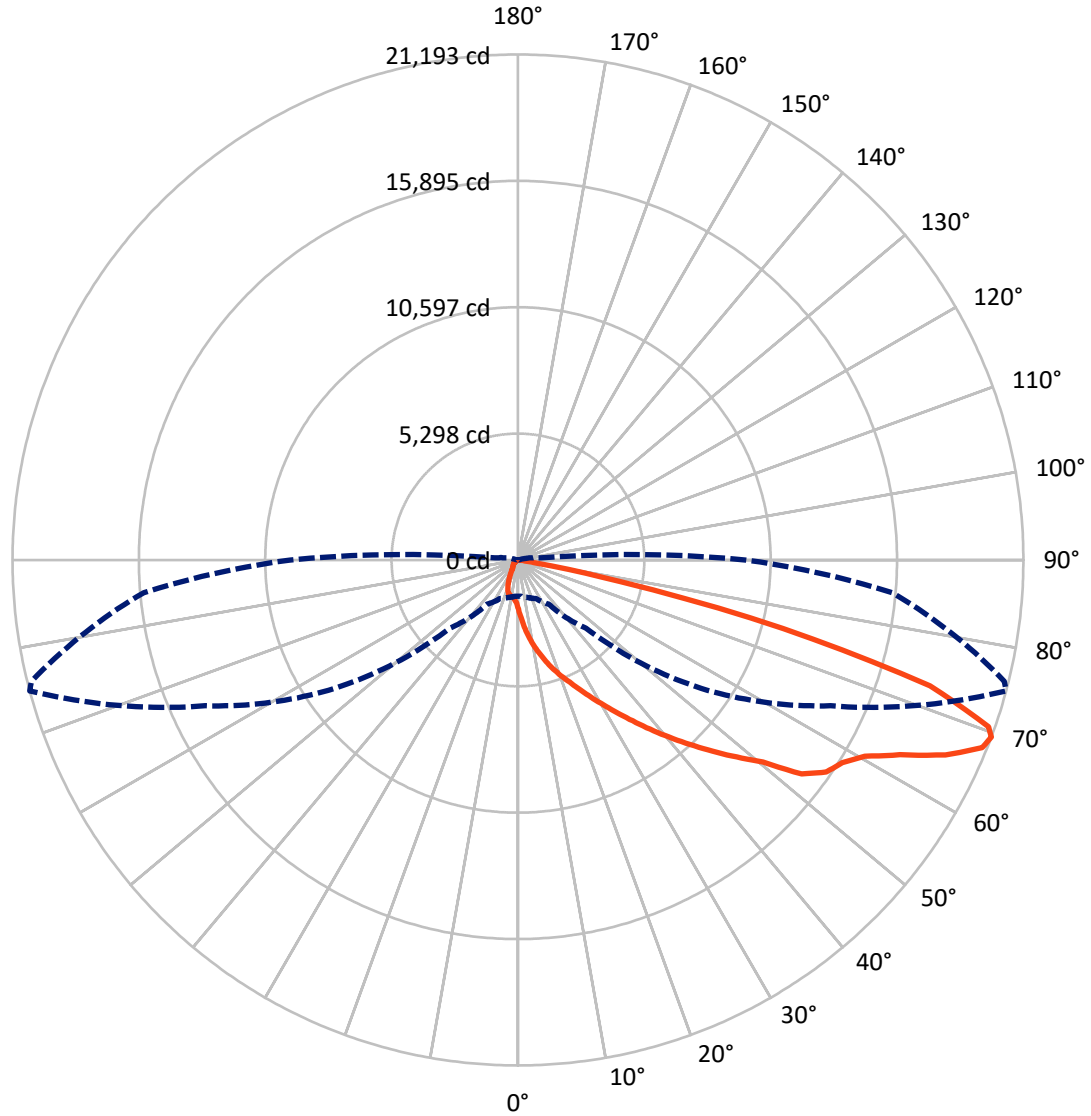
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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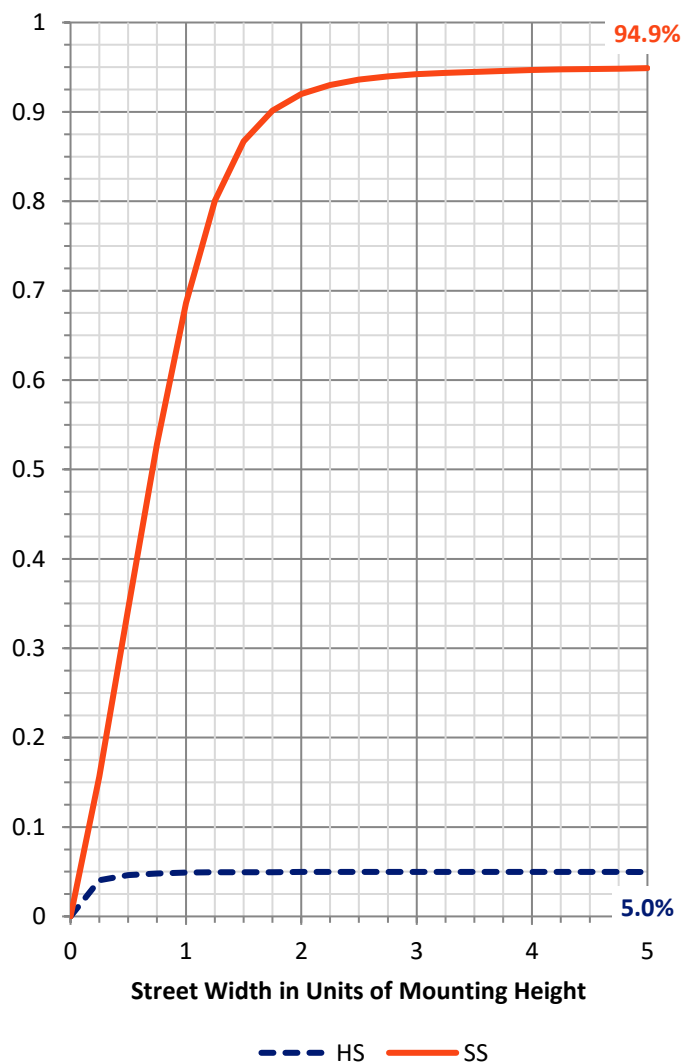
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1099.2	0.0	1099.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	20930.8	0.0	20930.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	22030.0	0.0	22030.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.0	1.1
10°-20°	854.5	3.9
20°-30°	1631.4	7.4
30°-40°	2926.4	13.3
40°-50°	4483.5	20.4
50°-60°	5210.9	23.7
60°-70°	4614.3	20.9
70°-80°	1990.3	9.0
80°-90°	79.7	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°	22030.0	100.0
0°-180°	22030.0	100.0

Coefficient of Utilization



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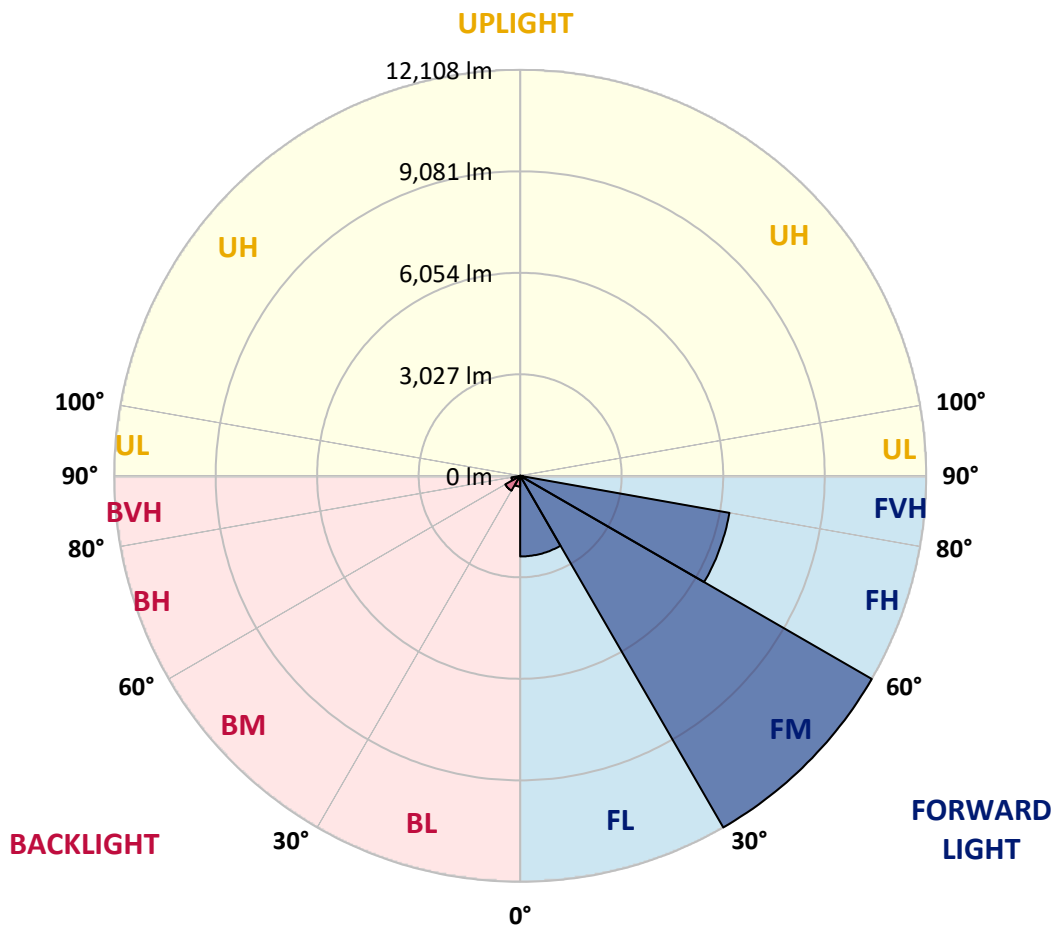
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2405.7	10.9			
FM (30°-60°)	12108.2	55.0			
FH (60°-80°)	6338.3	28.8			G3/7500
FVH (80°-90°)	78.6	0.4			G1/100
BL (0°-30°)	319.2	1.4	B1/500		
BM (30°-60°)	512.5	2.3	B1/1000		
BH (60°-80°)	266.3	1.2	B1/500		G1/500
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9
2.5°	3376.8	3343.5	3310.3	3272.2	3186.6	3039.2	2853.7	2653.9	2406.6	2363.8	2164.0
5°	4099.8	4085.5	4052.2	3999.9	3904.8	3743.1	3533.8	3238.9	2825.1	2753.8	2330.5
7.5°	4608.7	4599.2	4570.6	4508.8	4423.2	4261.5	4042.7	3724.0	3243.7	3162.8	2539.8
10°	5065.3	5060.5	5036.7	4979.6	4894.0	4718.1	4485.0	4152.1	3643.2	3552.8	2782.3
12.5°	5479.0	5483.8	5474.3	5445.7	5383.9	5217.5	4951.1	4589.6	4028.4	3928.5	3072.4
15°	5721.6	5735.9	5773.9	5831.0	5850.0	5716.8	5441.0	5041.5	4423.2	4337.6	3405.4
17.5°	5640.7	5655.0	5773.9	5968.9	6154.4	6173.4	5926.1	5469.5	4813.2	4727.6	3733.5
20°	5445.7	5464.8	5588.4	5854.8	6216.2	6468.3	6368.4	5935.6	5184.2	5079.5	4047.4
22.5°	5664.5	5664.5	5702.6	5864.3	6192.5	6587.2	6720.4	6401.7	5564.6	5436.2	4361.4
25°	6416.0	6401.7	6320.9	6254.3	6358.9	6710.9	6986.7	6877.3	6011.7	5864.3	4694.3
27.5°	7367.2	7433.8	7281.6	7039.0	6801.2	6953.4	7224.5	7348.2	6506.4	6354.2	5036.7
30°	8432.6	8461.1	8280.4	7957.0	7538.4	7391.0	7505.1	7752.5	7043.8	6877.3	5393.4
32.5°	9393.3	9369.5	9217.3	8879.7	8361.2	8042.6	7866.6	8075.9	7628.8	7438.6	5759.6
35°	10244.7	10263.7	10078.2	9688.2	9179.3	8841.6	8423.1	8442.1	8285.1	8066.4	6182.9
37.5°	11010.4	10977.1	10801.1	10411.1	9949.8	9583.6	9141.2	8822.6	9003.3	8775.0	6658.6
40°	11633.4	11600.2	11414.7	11034.2	10601.4	10301.7	9954.5	9331.5	9759.5	9498.0	7167.5
42.5°	12128.1	12090.0	11933.1	11566.9	11148.3	10882.0	10715.5	9959.3	10568.1	10306.5	7738.2
45°	12370.6	12337.3	12242.2	11966.4	11600.2	11367.1	11448.0	10682.2	11433.7	11214.9	8366.0
47.5°	12085.3	12071.0	12180.4	12132.8	11923.6	11799.9	12080.5	11471.7	12342.1	12128.1	9088.9
50°	11219.7	11243.4	11562.1	11956.9	12056.7	12204.2	12598.9	12304.1	13317.1	13088.8	9921.2
52.5°	9084.2	9245.9	10206.6	11157.8	11895.0	12451.5	13207.7	13493.1	14905.6	14682.1	11219.7
55°	6782.2	6848.8	7895.1	9521.7	11243.4	12432.5	13659.5	14192.2	15690.4	15462.1	11562.1
57.5°	5379.2	5402.9	5921.4	7581.2	9902.2	12004.4	13897.4	14444.3	16032.8	15842.6	12071.0
60°	4223.4	4252.0	4627.7	5769.2	8014.0	10848.7	13554.9	14663.1	16703.5	16551.3	12960.4
62.5°	3286.5	3315.0	3543.3	4213.9	6011.7	9069.9	12865.3	15015.0	17978.1	17906.8	14415.8
65°	2544.5	2554.0	2711.0	3024.9	4247.2	7143.7	12023.4	15343.2	19699.8	19638.0	15595.3
67.5°	1878.7	1892.9	2002.3	2197.3	2867.9	5131.8	10644.2	15091.1	20998.2	20817.5	16023.3
69°	1517.2	1531.5	1626.6	1783.5	2263.9	4042.7	9383.8	14468.1	21193.2	21022.0	15752.2
70°	1298.4	1307.9	1403.1	1536.2	1931.0	3433.9	8385.0	13930.6	20936.4	20769.9	15133.9
72.5°	832.3	879.9	975.0	1060.6	1279.4	2273.4	5659.8	11552.6	18063.7	17778.3	11852.2
75°	461.3	475.6	646.8	751.5	851.3	1479.2	3148.5	7205.5	11490.8	11291.0	6339.9
77.5°	380.5	390.0	456.6	570.7	570.7	827.6	1189.0	2839.4	4370.9	3942.8	1717.0
80°	266.3	275.9	347.2	375.7	409.0	466.1	385.2	623.1	675.4	599.3	256.8
82.5°	185.5	195.0	237.8	309.1	328.2	218.8	142.7	185.5	195.0	195.0	99.9
85°	33.3	47.6	176.0	256.8	195.0	66.6	80.9	66.6	61.8	66.6	23.8
87.5°	0.0	0.0	109.4	123.7	104.6	28.5	33.3	23.8	14.3	19.0	9.5
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°	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9	2049.9
2.5°	2064.2	1964.3	1793.1	1669.4	1564.8	1483.9	1450.6	1398.3	1360.2	1379.3	1355.5
5°	2121.2	1945.2	1669.4	1493.4	1369.8	1265.1	1179.5	1112.9	1060.6	1051.1	1041.6
7.5°	2211.6	1959.5	1598.1	1379.3	1193.8	1032.1	898.9	799.0	722.9	722.9	694.4
10°	2335.2	1997.6	1555.2	1265.1	989.3	770.5	637.3	542.2	504.1	499.4	489.9
12.5°	2506.5	2068.9	1522.0	1117.7	770.5	561.2	480.4	447.1	432.8	428.0	423.3
15°	2739.5	2173.5	1483.9	937.0	585.0	461.3	428.0	399.5	385.2	380.5	375.7
17.5°	2963.1	2268.7	1403.1	751.5	475.6	418.5	380.5	356.7	337.7	332.9	332.9
20°	3172.3	2349.5	1265.1	585.0	428.0	375.7	337.7	309.1	290.1	285.4	285.4
22.5°	3391.1	2416.1	1093.9	475.6	390.0	332.9	294.9	266.3	247.3	242.6	237.8
25°	3624.2	2463.7	898.9	423.3	352.0	294.9	252.1	228.3	214.0	209.3	204.5
27.5°	3876.2	2482.7	713.4	385.2	309.1	256.8	218.8	195.0	185.5	180.7	180.7
30°	4104.5	2463.7	551.7	342.4	271.1	223.5	190.2	171.2	161.7	157.0	157.0
32.5°	4342.3	2416.1	442.3	304.4	237.8	190.2	161.7	147.4	142.7	137.9	137.9
35°	4594.4	2354.3	380.5	271.1	204.5	166.5	142.7	133.2	128.4	123.7	123.7
37.5°	4889.3	2278.2	347.2	242.6	180.7	147.4	123.7	118.9	114.1	114.1	114.1
40°	5222.2	2183.1	323.4	218.8	161.7	128.4	109.4	104.6	99.9	99.9	99.9
42.5°	5574.2	2073.7	299.6	195.0	142.7	109.4	95.1	95.1	90.4	90.4	85.6
45°	5968.9	1964.3	275.9	171.2	123.7	95.1	80.9	76.1	76.1	71.3	71.3
47.5°	6435.0	1864.4	252.1	152.2	109.4	80.9	71.3	66.6	61.8	57.1	57.1
50°	7091.4	1854.9	223.5	133.2	99.9	66.6	57.1	52.3	47.6	42.8	42.8
52.5°	7742.9	1769.3	190.2	109.4	80.9	57.1	42.8	38.0	33.3	33.3	28.5
55°	7890.4	1626.6	166.5	95.1	61.8	42.8	33.3	23.8	23.8	19.0	19.0
57.5°	8213.8	1560.0	142.7	76.1	47.6	33.3	19.0	14.3	14.3	14.3	14.3
60°	8851.1	1541.0	123.7	66.6	33.3	23.8	14.3	9.5	9.5	4.8	4.8
62.5°	9731.0	1522.0	104.6	57.1	23.8	14.3	9.5	4.8	0.0	0.0	0.0
65°	10216.1	1393.5	85.6	42.8	19.0	14.3	4.8	0.0	0.0	0.0	0.0
67.5°	10087.7	1151.0	76.1	28.5	14.3	9.5	4.8	0.0	0.0	0.0	0.0
69°	9550.3	970.2	61.8	23.8	14.3	9.5	4.8	0.0	0.0	0.0	0.0
70°	8903.4	837.1	57.1	19.0	9.5	4.8	4.8	0.0	0.0	0.0	0.0
72.5°	6320.9	437.6	38.0	14.3	9.5	4.8	0.0	0.0	0.0	0.0	0.0
75°	2953.5	195.0	23.8	9.5	4.8	4.8	0.0	0.0	0.0	0.0	0.0
77.5°	651.6	90.4	14.3	9.5	4.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	123.7	33.3	9.5	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.8	14.3	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.3	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	0.0	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)