

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: P237238

Luminaire Tested: **ARCH-L-AF72-250-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20621 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

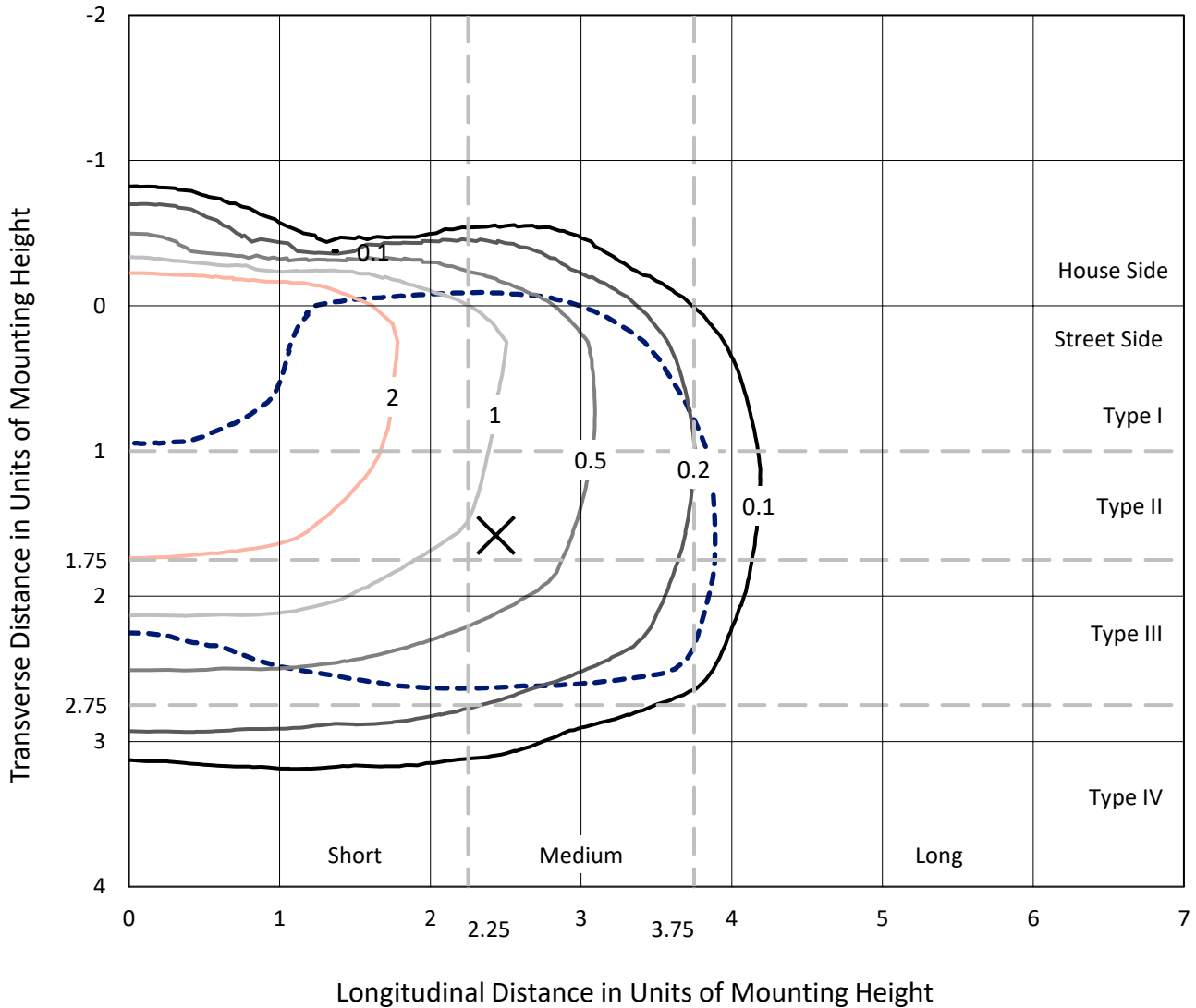
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

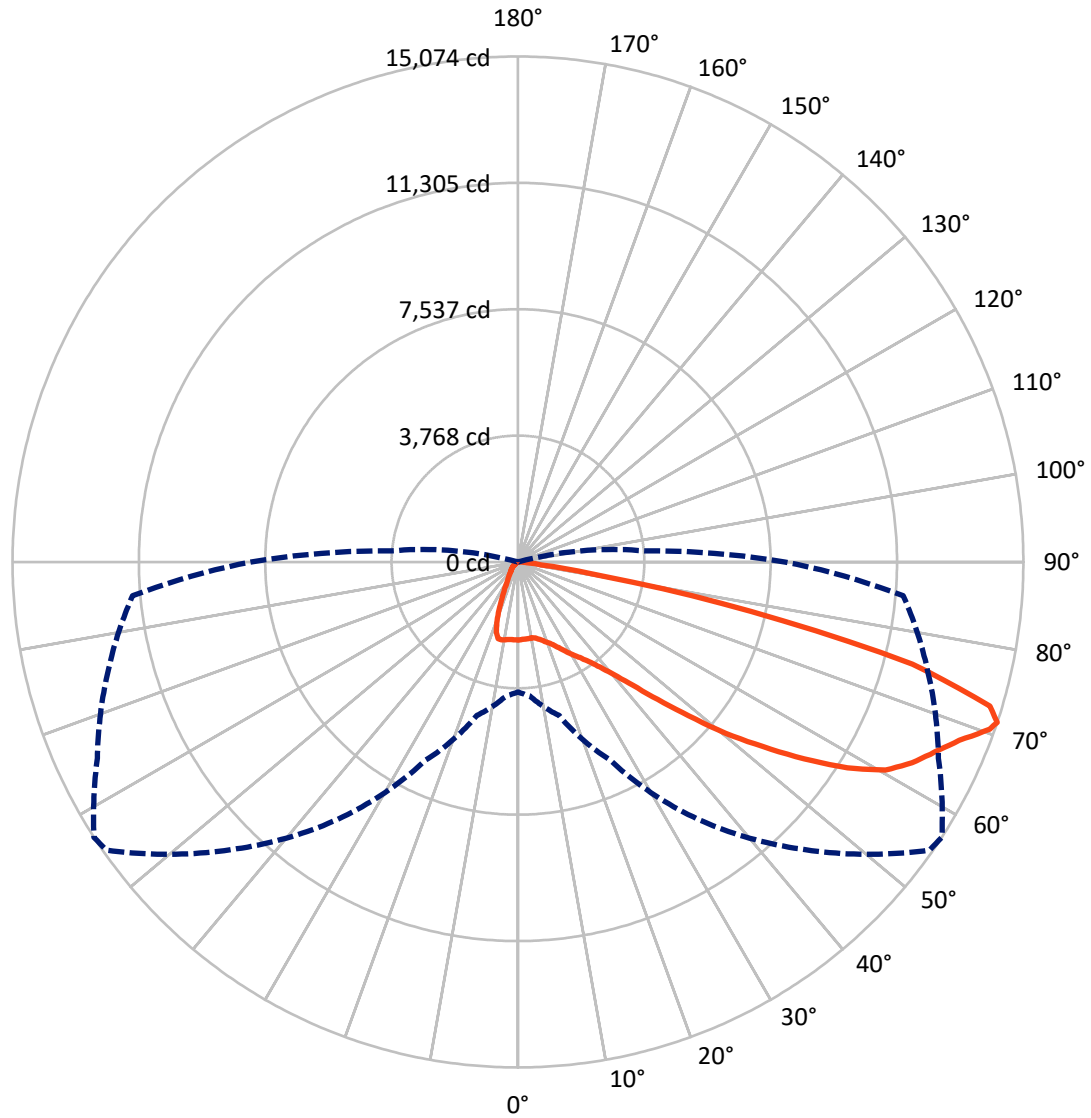
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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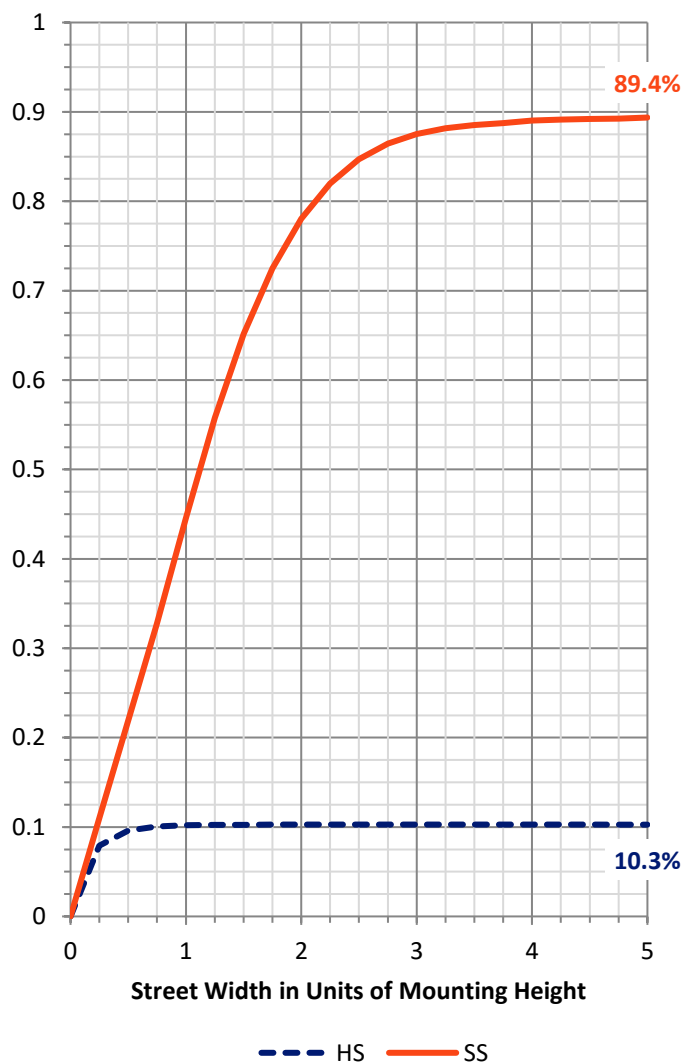
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2137.0	0.0	2137.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	18484.0	0.0	18484.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	20621.0	0.0	20621.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.9	1.1
10°-20°	585.2	2.8
20°-30°	912.9	4.4
30°-40°	1542.9	7.5
40°-50°	2996.8	14.5
50°-60°	5032.5	24.4
60°-70°	6005.8	29.1
70°-80°	3165.1	15.3
80°-90°	160.8	0.8
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°	20621.0	100.0
0°-180°	20621.0	100.0

Coefficient of Utilization



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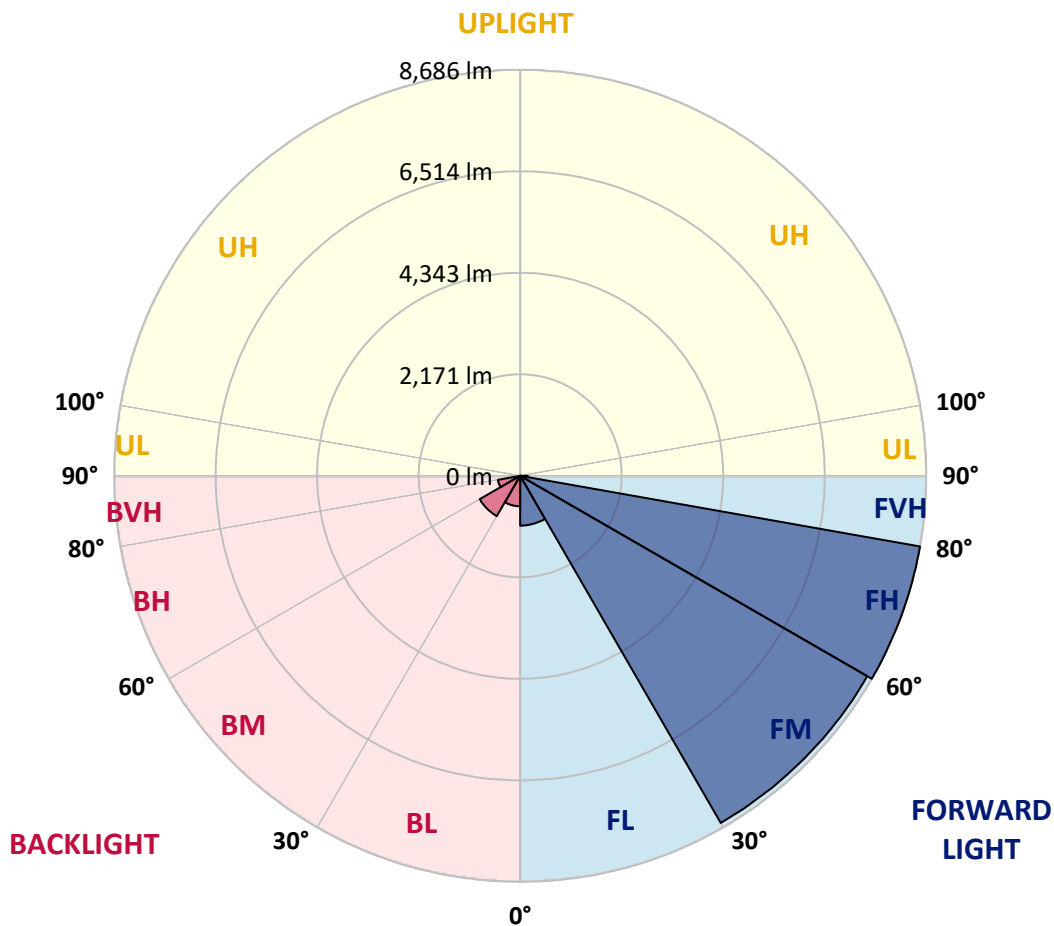
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1064.6	5.2			
FM (30°-60°)	8574.4	41.6			
FH (60°-80°)	8685.7	42.1			G4/12000
FVH (80°-90°)	159.3	0.8			G2/225
BL (0°-30°)	652.3	3.2	B2/1000		
BM (30°-60°)	997.8	4.8	B1/1000		
BH (60°-80°)	485.3	2.4	B1/500		G1/500
BVH (80°-90°)	1.5	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-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2296.8	2296.8	2296.8	2301.7	2306.5	2306.5	2316.1	2311.3	2311.3	2311.3	2320.9
5°	2234.4	2239.2	2244.0	2253.6	2272.8	2287.2	2311.3	2311.3	2316.1	2325.7	2330.5
7.5°	2147.9	2152.7	2167.1	2186.3	2224.8	2258.4	2296.8	2306.5	2320.9	2344.9	2354.5
10°	2095.0	2104.6	2123.9	2147.9	2191.1	2234.4	2282.4	2296.8	2340.1	2383.3	2407.4
12.5°	2080.6	2085.4	2104.6	2143.1	2195.9	2248.8	2311.3	2325.7	2388.1	2455.4	2493.9
15°	2104.6	2109.4	2119.1	2162.3	2224.8	2292.0	2373.7	2393.0	2469.8	2546.7	2594.8
17.5°	2147.9	2147.9	2157.5	2195.9	2263.2	2340.1	2445.8	2474.6	2561.1	2647.6	2700.5
20°	2176.7	2176.7	2191.1	2229.6	2306.5	2407.4	2532.3	2570.7	2666.8	2762.9	2811.0
22.5°	2205.6	2210.4	2224.8	2268.0	2354.5	2493.9	2638.0	2676.5	2787.0	2887.9	2935.9
25°	2287.2	2282.4	2287.2	2325.7	2426.6	2599.6	2782.2	2830.2	2945.5	3056.1	3080.1
27.5°	2513.1	2503.5	2441.0	2417.0	2493.9	2710.1	2964.8	3012.8	3147.4	3257.9	3257.9
30°	3032.0	3012.8	2859.0	2662.0	2599.6	2811.0	3137.7	3205.0	3378.0	3474.1	3445.3
32.5°	3690.3	3647.1	3450.1	3113.7	2863.9	2945.5	3320.3	3397.2	3618.3	3699.9	3637.5
35°	4411.1	4406.3	4161.2	3728.8	3373.2	3224.2	3555.8	3647.1	3925.8	3997.9	3897.0
37.5°	5175.1	5194.3	5031.0	4435.1	4017.1	3680.7	3868.1	3973.8	4315.0	4401.5	4305.4
40°	6025.6	6020.8	5958.4	5252.0	4790.7	4329.4	4319.8	4415.9	4829.2	4963.7	4829.2
42.5°	7102.0	7092.4	6866.5	6232.2	5727.7	5175.1	4978.1	5011.7	5473.0	5694.1	5497.1
45°	8197.5	8130.3	7870.8	7323.0	6876.1	6222.6	5847.8	5847.8	6241.9	6544.6	6237.1
47.5°	8807.8	8740.5	8634.8	8332.1	8197.5	7467.2	6914.6	6847.3	7154.8	7462.4	7029.9
50°	9610.3	9610.3	9346.0	9230.6	9461.3	8947.1	8091.8	8024.6	8173.5	8418.6	7851.6
52.5°	10244.5	10129.2	9941.8	10042.7	10701.0	10465.6	9269.1	9139.3	9254.7	9317.1	8567.5
55°	10508.8	10398.3	10383.9	10753.9	11772.6	11445.8	10475.2	10359.8	10350.2	10042.7	9192.2
57.5°	10561.7	10465.6	10648.2	11296.8	12815.3	12248.3	11676.5	11590.0	11320.9	10552.1	9831.3
60°	10114.8	10162.8	10604.9	11594.8	13430.3	12945.0	12690.3	12599.0	11979.2	10984.5	10542.4
62.5°	9197.0	9312.3	10138.8	11623.6	13204.5	13228.5	13252.5	13190.1	12488.5	11378.5	11258.4
65°	8111.1	8144.7	9139.3	11224.8	12810.5	13142.0	13665.8	13661.0	12877.7	11820.6	12065.7
67.5°	6683.9	6741.6	7601.7	9879.3	12022.4	13103.6	14208.8	14194.3	13319.8	12325.1	12546.2
70°	4973.3	5045.4	5742.1	7683.4	10263.7	12623.1	14919.9	14929.5	13785.9	12709.6	12214.6
71°	3877.7	4007.5	4737.9	6525.4	9365.2	12137.7	14987.2	15073.7	13838.8	12656.7	11532.3
72.5°	1902.8	2056.6	2974.4	4593.7	7707.4	11051.8	14545.1	14713.3	13507.2	11998.4	9860.1
75°	494.9	523.8	888.9	1878.8	4132.4	7323.0	11729.3	12157.0	11042.2	9134.5	6025.6
77.5°	312.3	321.9	418.0	730.4	1547.3	2782.2	6890.5	7102.0	6309.1	4627.3	2123.9
80°	221.0	225.8	264.3	470.9	903.4	812.1	2479.4	2570.7	2282.4	1225.3	379.6
82.5°	134.5	134.5	192.2	302.7	557.4	442.1	653.5	696.7	615.1	341.2	124.9
85°	76.9	81.7	120.1	206.6	264.3	216.2	245.1	259.5	264.3	225.8	52.9
87.5°	62.5	67.3	105.7	173.0	144.2	105.7	105.7	110.5	115.3	134.5	24.0
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°	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2320.9	2320.9	2325.7	2320.9	2320.9	2320.9	2325.7	2325.7	2325.7	2335.3	2340.1
5°	2330.5	2330.5	2330.5	2325.7	2320.9	2320.9	2330.5	2335.3	2335.3	2349.7	2349.7
7.5°	2354.5	2354.5	2344.9	2335.3	2325.7	2311.3	2316.1	2320.9	2316.1	2320.9	2320.9
10°	2407.4	2407.4	2393.0	2373.7	2344.9	2301.7	2244.0	2171.9	2104.6	2080.6	2071.0
12.5°	2493.9	2489.1	2460.2	2426.6	2364.1	2215.2	1998.9	1744.3	1532.8	1475.2	1456.0
15°	2590.0	2580.4	2546.7	2489.1	2320.9	1926.9	1475.2	1148.4	946.6	898.6	888.9
17.5°	2690.9	2676.5	2628.4	2513.1	2123.9	1431.9	951.4	720.8	610.3	600.6	605.4
20°	2796.6	2777.4	2710.1	2465.0	1715.4	956.2	615.1	557.4	547.8	547.8	552.6
22.5°	2916.7	2892.7	2801.4	2292.0	1249.3	634.3	528.6	523.8	519.0	514.1	514.1
25°	3056.1	3027.2	2887.9	1979.7	860.1	519.0	504.5	490.1	480.5	470.9	466.1
27.5°	3224.2	3185.8	2955.2	1595.3	591.0	485.3	475.7	451.7	432.5	413.2	413.2
30°	3392.4	3344.4	2935.9	1201.3	480.5	451.7	432.5	403.6	374.8	355.6	350.8
32.5°	3570.2	3522.2	2811.0	807.3	437.3	413.2	389.2	346.0	312.3	288.3	283.5
35°	3834.5	3796.0	2565.9	533.4	394.0	365.2	331.6	288.3	245.1	221.0	216.2
37.5°	4228.5	4180.5	2263.2	408.4	346.0	302.7	273.9	225.8	182.6	158.6	153.8
40°	4757.1	4612.9	1902.8	360.4	302.7	249.9	211.4	163.4	129.7	115.3	115.3
42.5°	5372.1	5031.0	1513.6	326.7	269.1	206.6	153.8	110.5	91.3	86.5	86.5
45°	6025.6	5420.2	1124.4	302.7	235.5	163.4	110.5	76.9	67.3	62.5	62.5
47.5°	6698.3	5737.3	783.2	273.9	197.0	124.9	76.9	57.7	48.1	43.2	43.2
50°	7327.8	5943.9	552.6	245.1	168.2	91.3	57.7	43.2	33.6	33.6	33.6
52.5°	7765.1	5924.7	398.8	211.4	129.7	62.5	38.4	28.8	28.8	28.8	28.8
55°	8149.5	5852.6	312.3	182.6	100.9	43.2	28.8	24.0	24.0	19.2	19.2
57.5°	8476.2	5737.3	264.3	149.0	72.1	33.6	19.2	19.2	14.4	14.4	14.4
60°	8754.9	5593.2	221.0	124.9	48.1	24.0	14.4	9.6	9.6	4.8	9.6
62.5°	9134.5	5501.9	192.2	96.1	33.6	14.4	9.6	4.8	4.8	0.0	0.0
65°	9413.2	5328.9	163.4	67.3	19.2	9.6	4.8	4.8	0.0	0.0	0.0
67.5°	9422.9	5016.6	120.1	38.4	14.4	9.6	4.8	0.0	0.0	0.0	0.0
70°	8663.6	4276.6	76.9	19.2	9.6	4.8	4.8	0.0	0.0	0.0	0.0
71°	7966.9	3786.4	62.5	14.4	9.6	4.8	0.0	0.0	0.0	0.0	0.0
72.5°	6563.8	2782.2	48.1	14.4	4.8	4.8	0.0	0.0	0.0	0.0	0.0
75°	3618.3	1009.1	24.0	9.6	4.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1158.0	307.5	14.4	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	197.0	48.1	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	67.3	19.2	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.2	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.6	4.8	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)