

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: P237196

Luminaire Tested: **ARCH-L-AF72-230-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237196
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T3-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 980mA 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: 18858.1 lumens
Efficiency: N/A
Efficacy: 82.3 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

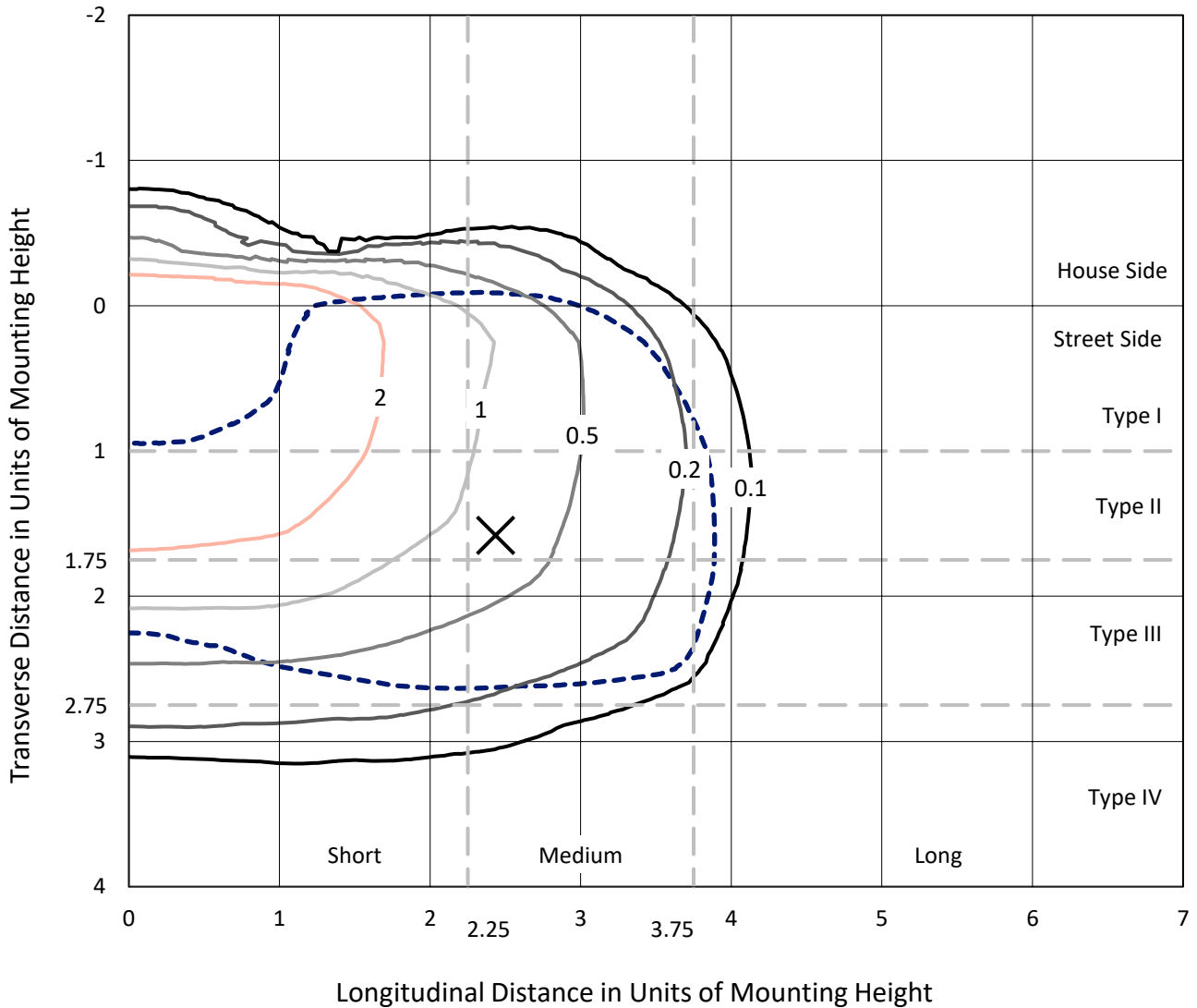
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

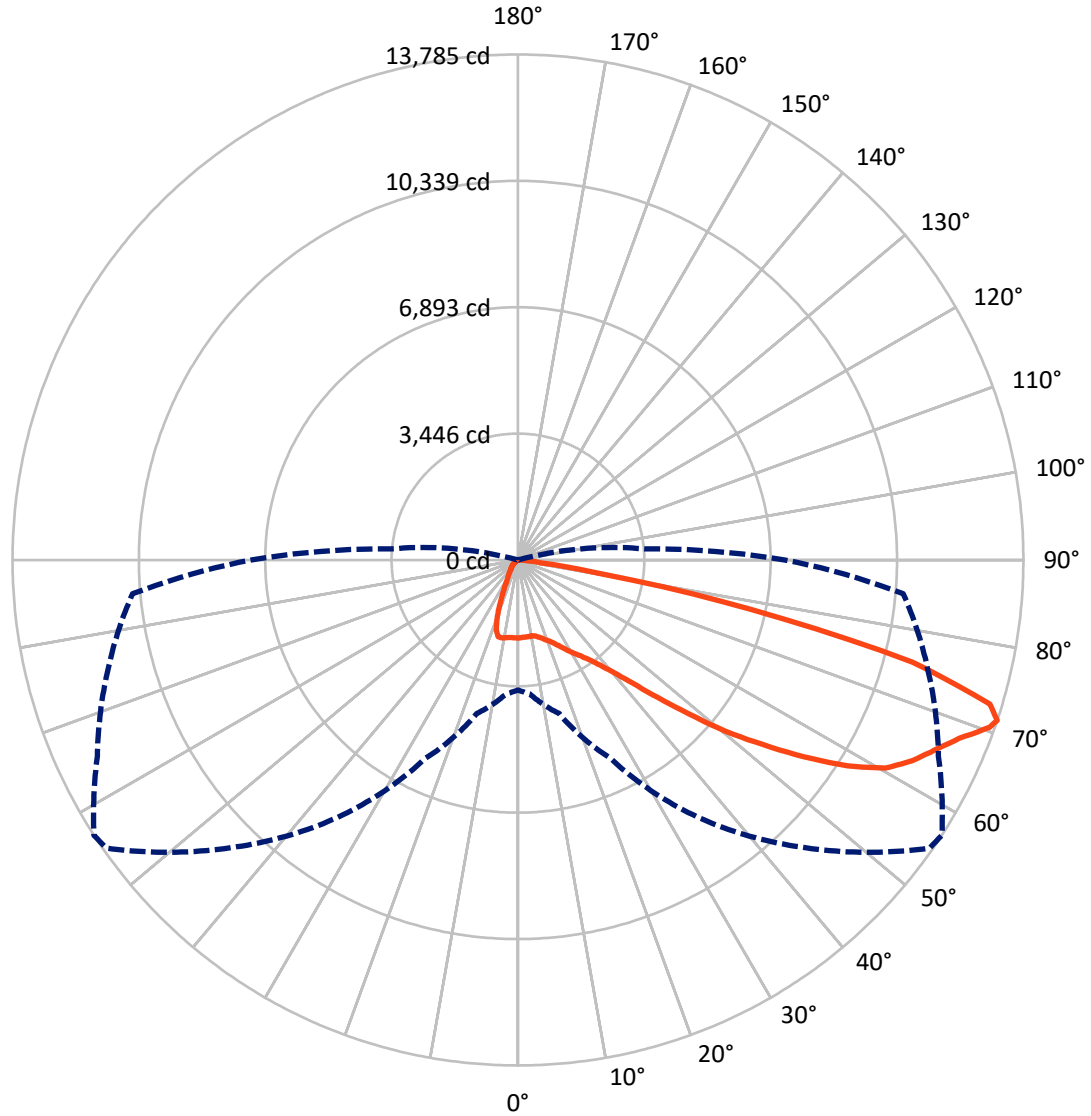
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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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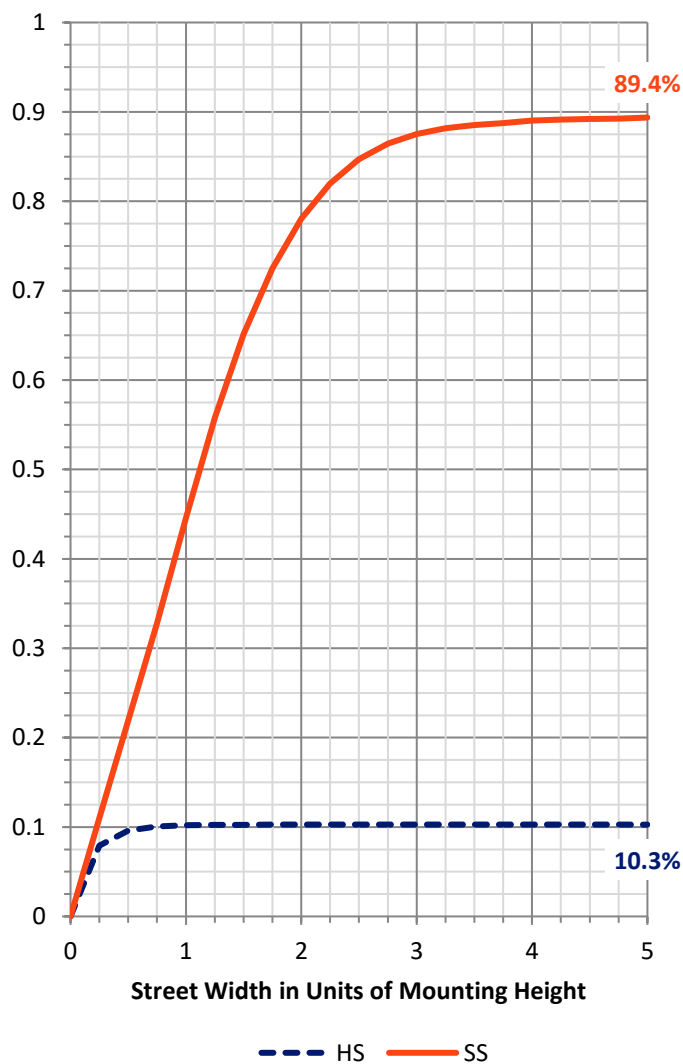
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1954.3	0.0	1954.3
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	16903.9	0.0	16903.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	18858.1	0.0	18858.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.2	1.1
10°-20°	535.2	2.8
20°-30°	834.9	4.4
30°-40°	1411.0	7.5
40°-50°	2740.6	14.5
50°-60°	4602.3	24.4
60°-70°	5492.4	29.1
70°-80°	2894.6	15.3
80°-90°	147.1	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°	18858.1	100.0
0°-180°	18858.1	100.0

Coefficient of Utilization



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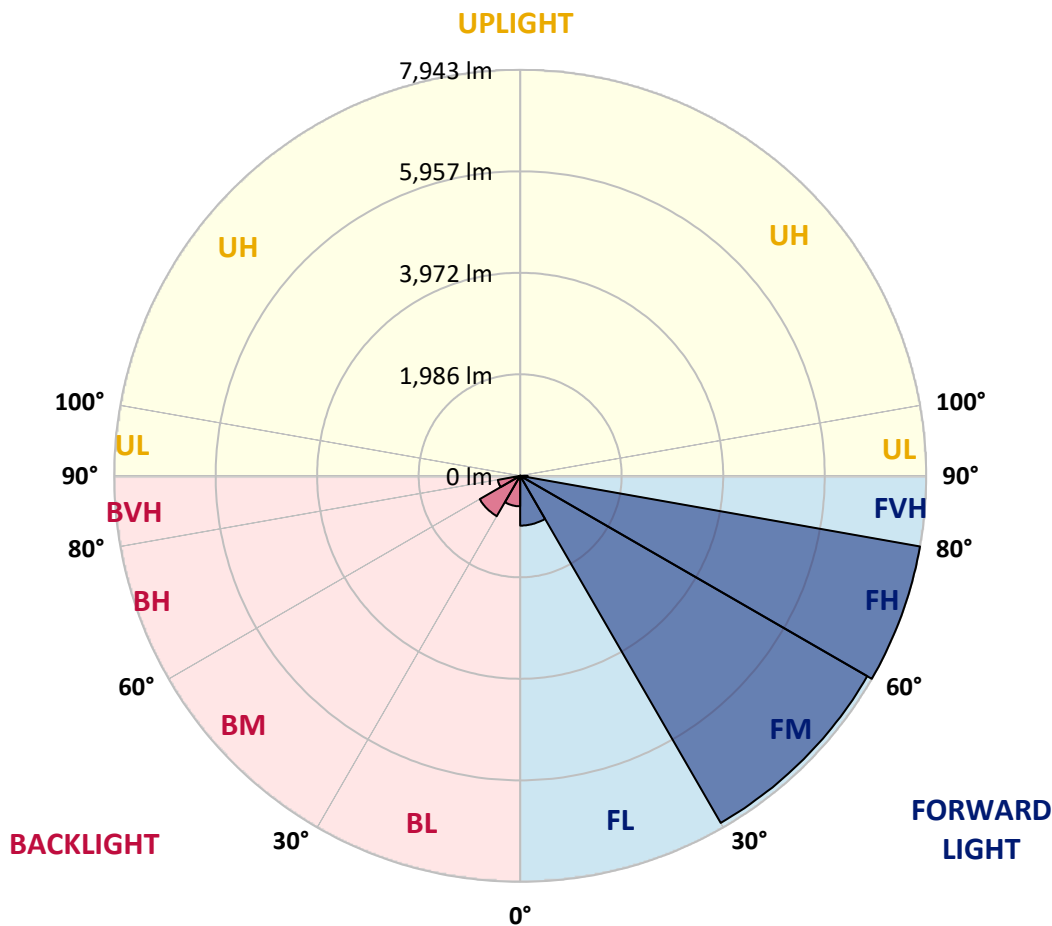
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	973.6	5.2			
FM (30°-60°)	7841.4	41.6			
FH (60°-80°)	7943.2	42.1			G4/12000
FVH (80°-90°)	145.7	0.8			G2/225
BL (0°-30°)	596.5	3.2	B2/1000		
BM (30°-60°)	912.5	4.8	B1/1000		
BH (60°-80°)	443.8	2.4	B1/500		G1/500
BVH (80°-90°)	1.4	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°	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2
2.5°	2100.5	2100.5	2100.5	2104.9	2109.2	2109.2	2118.1	2113.7	2113.7	2113.7	2122.5
5°	2043.3	2047.7	2052.1	2060.9	2078.5	2091.7	2113.7	2113.7	2118.1	2126.8	2131.2
7.5°	1964.3	1968.7	1981.9	1999.5	2034.6	2065.3	2100.5	2109.2	2122.5	2144.4	2153.3
10°	1916.0	1924.7	1942.3	1964.3	2003.9	2043.3	2087.3	2100.5	2140.1	2179.6	2201.6
12.5°	1902.7	1907.1	1924.7	1959.9	2008.1	2056.6	2113.7	2126.8	2184.0	2245.5	2280.7
15°	1924.7	1929.1	1937.9	1977.5	2034.6	2096.1	2170.8	2188.4	2258.7	2329.0	2372.9
17.5°	1964.3	1964.3	1973.1	2008.1	2069.7	2140.1	2236.7	2263.1	2342.2	2421.3	2469.6
20°	1990.6	1990.6	2003.9	2039.0	2109.2	2201.6	2315.9	2350.9	2438.8	2526.7	2570.7
22.5°	2017.0	2021.4	2034.6	2074.2	2153.3	2280.7	2412.5	2447.6	2548.7	2641.1	2684.9
25°	2091.7	2087.3	2091.7	2126.8	2219.2	2377.4	2544.3	2588.3	2693.8	2794.9	2816.8
27.5°	2298.3	2289.4	2232.2	2210.4	2280.7	2478.4	2711.3	2755.3	2878.3	2979.4	2979.4
30°	2772.8	2755.3	2614.7	2434.6	2377.4	2570.7	2869.4	2931.0	3089.2	3177.2	3150.7
32.5°	3374.9	3335.3	3155.2	2847.6	2619.1	2693.8	3036.6	3106.8	3308.9	3383.6	3326.5
35°	4034.0	4029.6	3805.5	3410.0	3084.8	2948.6	3251.8	3335.3	3590.2	3656.2	3563.8
37.5°	4732.7	4750.3	4600.9	4056.0	3673.7	3366.1	3537.5	3634.1	3946.1	4025.2	3937.3
40°	5510.5	5506.1	5449.0	4803.0	4381.2	3959.3	3950.5	4038.4	4416.4	4539.4	4416.4
42.5°	6494.8	6486.0	6279.5	5699.5	5238.1	4732.7	4552.5	4583.3	5005.1	5207.3	5027.1
45°	7496.8	7435.2	7197.9	6696.9	6288.3	5690.7	5347.9	5347.9	5708.2	5985.1	5703.9
47.5°	8054.8	7993.3	7896.6	7619.7	7496.8	6828.8	6323.5	6261.9	6543.2	6824.5	6429.0
50°	8788.7	8788.7	8547.1	8441.5	8652.5	8182.3	7400.0	7338.5	7474.8	7698.9	7180.4
52.5°	9368.8	9263.3	9091.9	9184.3	9786.3	9570.9	8476.7	8358.0	8463.6	8520.6	7835.1
55°	9610.5	9509.4	9496.2	9834.5	10766.2	10467.4	9579.7	9474.2	9465.4	9184.3	8406.4
57.5°	9658.7	9570.9	9737.8	10331.1	11719.7	11201.1	10678.2	10599.1	10353.1	9650.0	8990.8
60°	9250.1	9294.0	9698.3	10603.5	12282.2	11838.4	11605.4	11521.9	10955.1	10045.6	9641.1
62.5°	8410.8	8516.2	9272.1	10630.0	12075.7	12097.6	12119.6	12062.4	11420.9	10405.9	10295.9
65°	7417.6	7448.4	8358.0	10265.2	11715.4	12018.5	12497.5	12493.1	11776.8	10810.1	11034.2
67.5°	6112.5	6165.3	6951.8	9034.7	10994.6	11983.3	12994.1	12980.9	12181.1	11271.5	11473.7
70°	4548.1	4614.0	5251.2	7026.6	9386.4	11543.9	13644.4	13653.2	12607.4	11623.0	11170.4
71°	3546.2	3664.9	4332.7	5967.5	8564.7	11100.0	13705.9	13785.0	12655.7	11574.7	10546.5
72.5°	1740.2	1880.8	2720.1	4201.0	7048.6	10107.0	13301.7	13455.5	12352.6	10972.7	9017.1
75°	452.7	479.0	813.0	1718.2	3779.2	6696.9	10726.6	11117.6	10098.2	8353.6	5510.5
77.5°	285.6	294.5	382.3	667.9	1415.0	2544.3	6301.5	6494.8	5769.8	4231.7	1942.3
80°	202.1	206.5	241.7	430.7	826.1	742.6	2267.4	2350.9	2087.3	1120.6	347.1
82.5°	123.0	123.0	175.8	276.9	509.7	404.3	597.6	637.2	562.4	312.1	114.2
85°	70.4	74.8	109.8	188.9	241.7	197.8	224.1	237.3	241.7	206.5	48.3
87.5°	57.2	61.5	96.7	158.2	131.8	96.7	96.7	101.1	105.4	123.0	22.0
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°	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2	2131.2
2.5°	2122.5	2122.5	2126.8	2122.5	2122.5	2122.5	2126.8	2126.8	2126.8	2135.7	2140.1
5°	2131.2	2131.2	2131.2	2126.8	2122.5	2122.5	2131.2	2135.7	2135.7	2148.8	2148.8
7.5°	2153.3	2153.3	2144.4	2135.7	2126.8	2113.7	2118.1	2122.5	2118.1	2122.5	2122.5
10°	2201.6	2201.6	2188.4	2170.8	2144.4	2104.9	2052.1	1986.3	1924.7	1902.7	1894.0
12.5°	2280.7	2276.3	2249.8	2219.2	2162.0	2025.7	1828.0	1595.1	1401.8	1349.1	1331.5
15°	2368.5	2359.8	2329.0	2276.3	2122.5	1762.2	1349.1	1050.2	865.7	821.7	813.0
17.5°	2460.8	2447.6	2403.7	2298.3	1942.3	1309.5	870.0	659.2	558.1	549.2	553.7
20°	2557.5	2540.0	2478.4	2254.3	1568.8	874.5	562.4	509.7	501.0	501.0	505.4
22.5°	2667.3	2645.3	2561.9	2096.1	1142.6	580.0	483.4	479.0	474.6	470.2	470.2
25°	2794.9	2768.4	2641.1	1810.4	786.5	474.6	461.4	448.2	439.4	430.7	426.2
27.5°	2948.6	2913.4	2702.5	1458.9	540.5	443.8	435.1	413.1	395.5	377.9	377.9
30°	3102.4	3058.5	2684.9	1098.6	439.4	413.1	395.5	369.1	342.7	325.1	320.7
32.5°	3265.0	3221.1	2570.7	738.3	399.9	377.9	355.9	316.5	285.6	263.7	259.3
35°	3506.6	3471.5	2346.6	487.8	360.3	334.0	303.2	263.7	224.1	202.1	197.8
37.5°	3867.0	3823.1	2069.7	373.5	316.5	276.9	250.5	206.5	166.9	145.0	140.6
40°	4350.3	4218.6	1740.2	329.5	276.9	228.5	193.4	149.3	118.6	105.4	105.4
42.5°	4912.9	4600.9	1384.2	298.9	246.1	188.9	140.6	101.1	83.5	79.1	79.1
45°	5510.5	4956.9	1028.2	276.9	215.3	149.3	101.1	70.4	61.5	57.2	57.2
47.5°	6125.7	5246.8	716.3	250.5	180.2	114.2	70.4	52.8	43.9	39.6	39.6
50°	6701.4	5435.7	505.4	224.1	153.8	83.5	52.8	39.6	30.8	30.8	30.8
52.5°	7101.3	5418.2	364.7	193.4	118.6	57.2	35.2	26.3	26.3	26.3	26.3
55°	7452.8	5352.3	285.6	166.9	92.4	39.6	26.3	22.0	22.0	17.6	17.6
57.5°	7751.6	5246.8	241.7	136.2	65.9	30.8	17.6	17.6	13.2	13.2	13.2
60°	8006.5	5115.0	202.1	114.2	43.9	22.0	13.2	8.7	8.7	4.4	8.7
62.5°	8353.6	5031.5	175.8	87.9	30.8	13.2	8.7	4.4	4.4	0.0	0.0
65°	8608.5	4873.3	149.3	61.5	17.6	8.7	4.4	4.4	0.0	0.0	0.0
67.5°	8617.3	4587.7	109.8	35.2	13.2	8.7	4.4	0.0	0.0	0.0	0.0
70°	7923.1	3910.9	70.4	17.6	8.7	4.4	4.4	0.0	0.0	0.0	0.0
71°	7285.9	3462.8	57.2	13.2	8.7	4.4	0.0	0.0	0.0	0.0	0.0
72.5°	6002.7	2544.3	43.9	13.2	4.4	4.4	0.0	0.0	0.0	0.0	0.0
75°	3308.9	922.8	22.0	8.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1059.0	281.3	13.2	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	180.2	43.9	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	61.5	17.6	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.6	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	4.4	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)