

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: P399608

Luminaire Tested: **ARCH-L-PA3-160-830-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399608
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-830-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13685 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

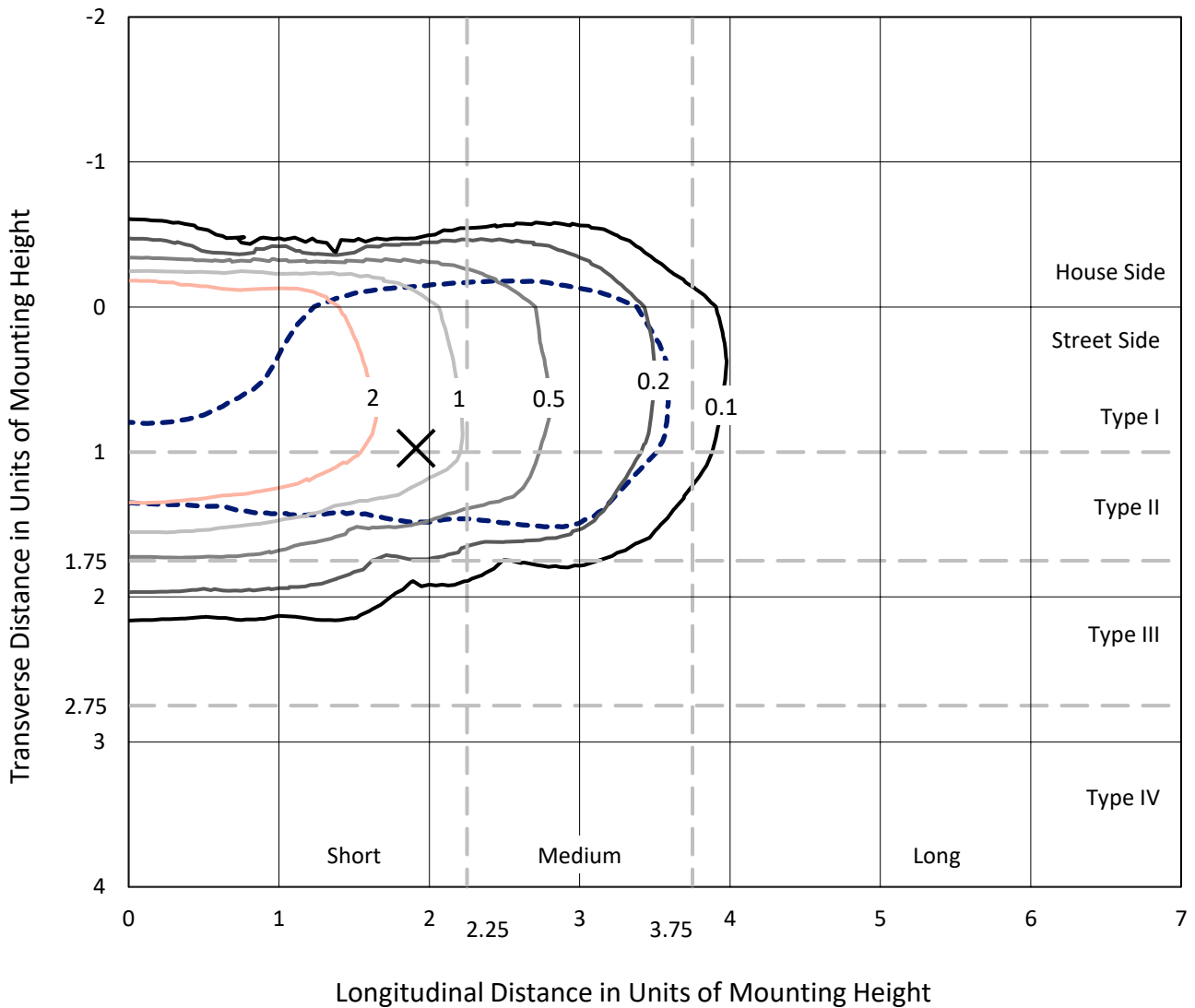
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

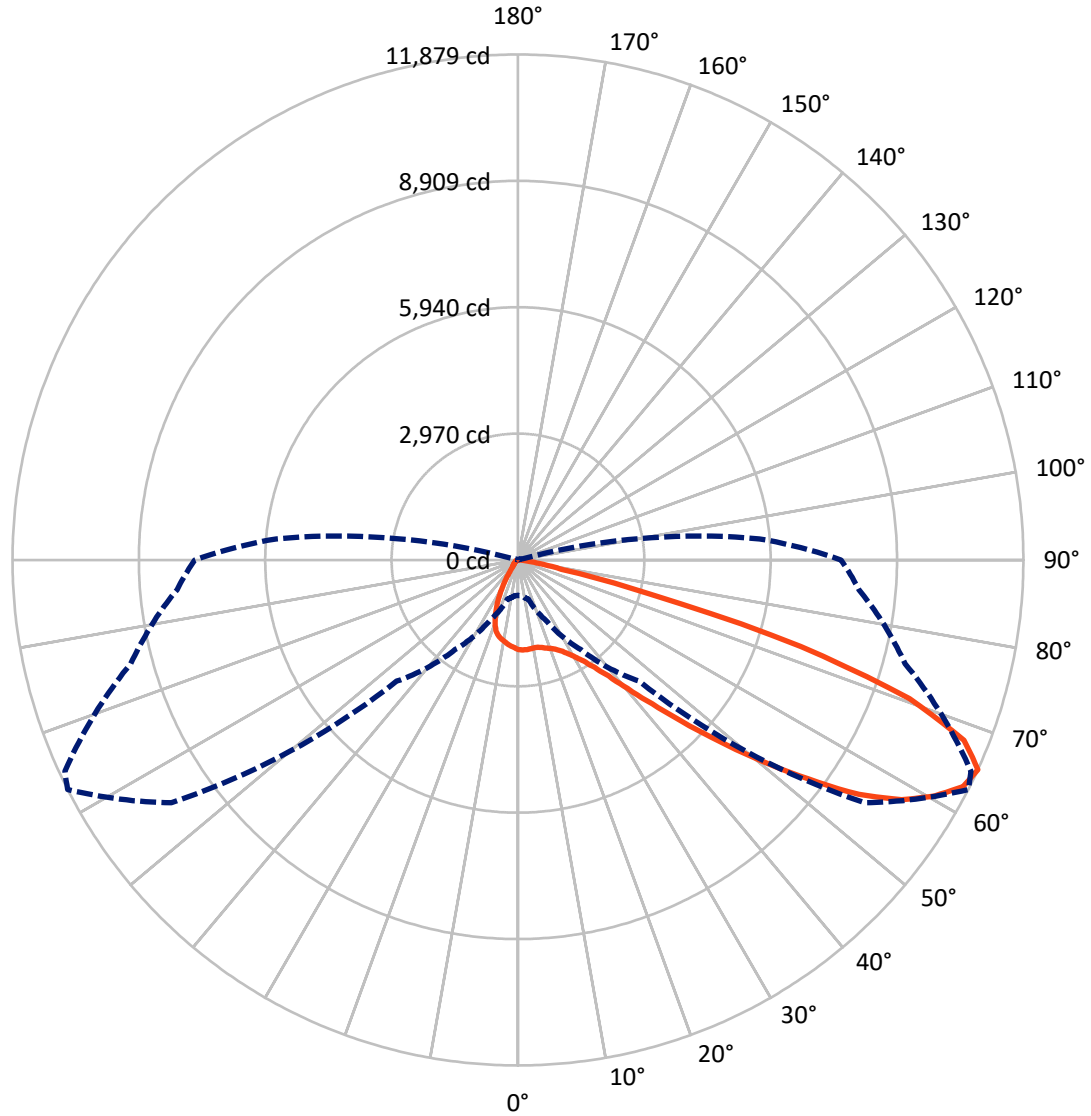
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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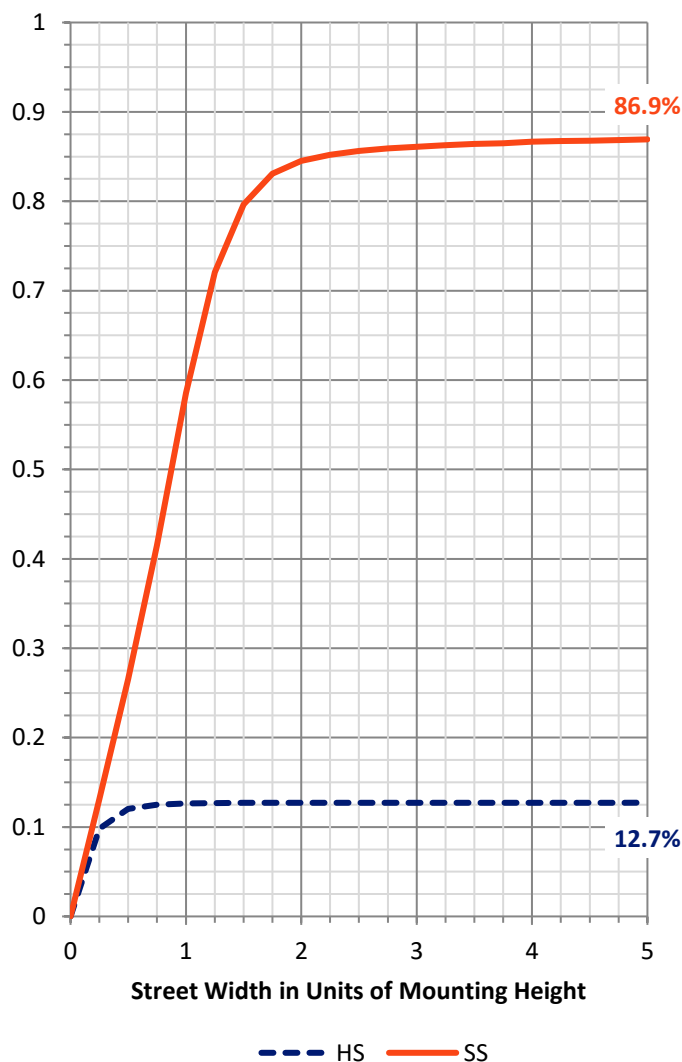
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1761.3	0.0	1761.3
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	11923.8	0.0	11923.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	13685.0	0.0	13685.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.4	1.4
10°-20°	474.5	3.5
20°-30°	703.4	5.1
30°-40°	1306.0	9.5
40°-50°	2766.6	20.2
50°-60°	3825.5	28.0
60°-70°	3062.5	22.4
70°-80°	1272.4	9.3
80°-90°	81.7	0.6
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°	13685.0	100.0
0°-180°	13685.0	100.0

Coefficient of Utilization



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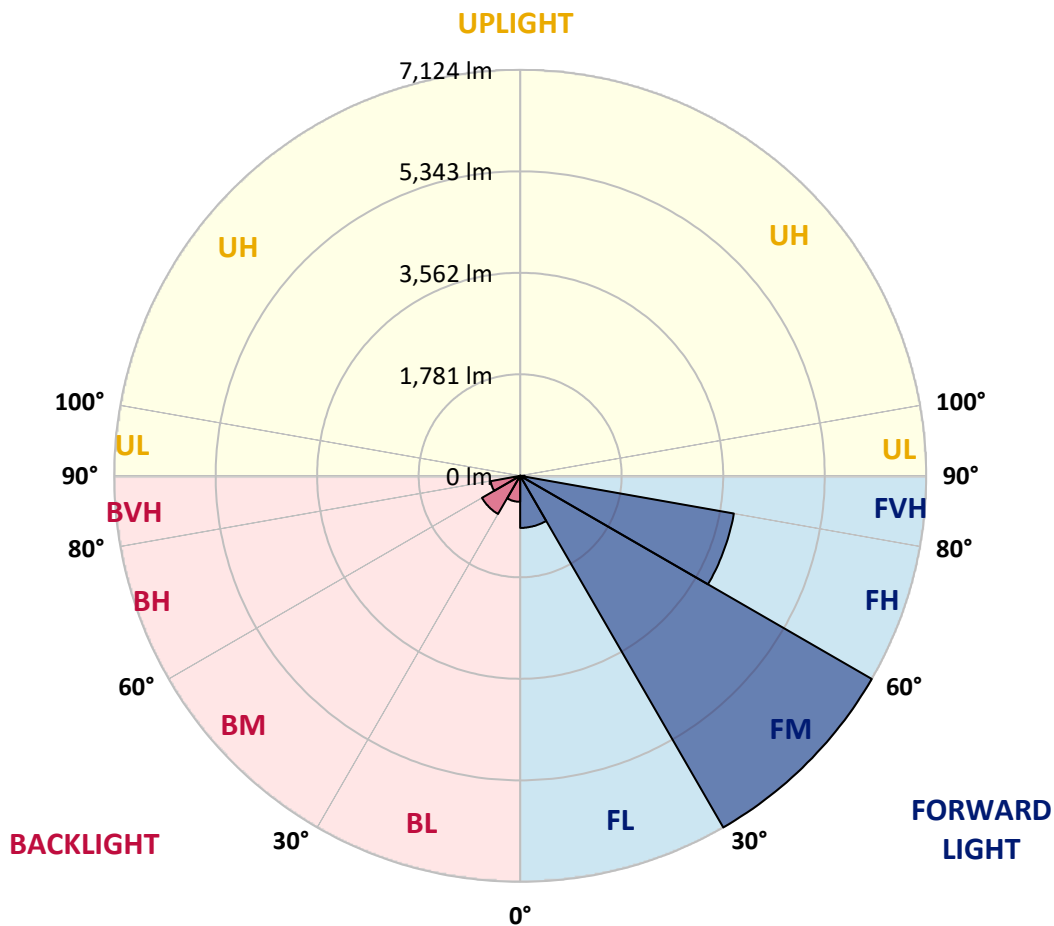
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	913.8	6.7			
FM (30°-60°)	7124.5	52.1			
FH (60°-80°)	3807.5	27.8			G2/5000
FVH (80°-90°)	78.0	0.6			G1/100
BL (0°-30°)	456.5	3.3	B1/500		
BM (30°-60°)	773.7	5.7	B1/1000		
BH (60°-80°)	527.4	3.9	B2/1000		G2/1000
BVH (80°-90°)	3.7	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2
2.5°	2144.4	2139.2	2134.0	2131.4	2131.4	2128.9	2118.5	2115.9	2110.8	2105.6	2100.4
5°	2123.7	2115.9	2113.3	2115.9	2118.5	2123.7	2118.5	2118.5	2113.3	2108.2	2097.8
7.5°	2072.0	2066.8	2069.4	2077.2	2079.8	2097.8	2100.4	2108.2	2108.2	2103.0	2095.3
10°	2010.0	2007.4	2007.4	2020.3	2033.3	2059.1	2077.2	2097.8	2100.4	2100.4	2087.5
12.5°	1963.5	1960.9	1968.7	1984.2	2010.0	2043.6	2074.6	2105.6	2110.8	2113.3	2092.7
15°	1935.1	1935.1	1945.4	1976.4	2012.6	2059.1	2095.3	2136.6	2141.8	2139.2	2110.8
17.5°	1909.2	1911.8	1932.5	1984.2	2025.5	2087.5	2131.4	2177.9	2180.5	2177.9	2131.4
20°	1898.9	1904.1	1935.1	2002.3	2048.8	2118.5	2175.4	2221.9	2224.4	2214.1	2152.1
22.5°	1927.3	1929.9	1968.7	2041.0	2084.9	2162.4	2234.8	2278.7	2281.3	2265.8	2183.1
25°	2025.5	2025.5	2059.1	2121.1	2159.9	2237.4	2314.9	2366.5	2366.5	2348.5	2252.9
27.5°	2255.4	2234.8	2227.0	2245.1	2258.0	2340.7	2423.4	2488.0	2485.4	2459.5	2343.3
30°	2699.8	2648.1	2565.5	2472.5	2426.0	2482.8	2560.3	2643.0	2640.4	2599.1	2454.4
32.5°	3446.5	3371.5	3175.2	2929.8	2730.8	2666.2	2738.6	2829.0	2831.6	2782.5	2632.6
35°	4492.8	4374.0	4022.6	3681.6	3226.9	2981.4	3002.1	3100.3	3131.3	3105.4	2932.3
37.5°	5500.4	5391.9	5056.0	4583.2	3965.8	3464.5	3376.7	3462.0	3498.1	3498.1	3314.7
40°	6515.7	6389.1	6092.0	5616.7	4965.6	4218.9	3903.8	3973.5	4012.3	4020.0	3779.7
42.5°	7329.5	7246.9	7019.5	6650.1	6040.4	5541.7	4663.3	4624.6	4660.7	4632.3	4319.7
45°	7892.8	7828.2	7670.6	7531.1	7234.0	6983.4	5678.7	5417.7	5441.0	5342.8	4926.8
47.5°	8009.0	7936.7	7903.1	8096.9	8308.7	8370.7	6926.5	6360.7	6337.5	6120.4	5557.2
50°	7502.6	7510.4	7634.4	8187.3	9070.9	9628.9	8373.3	7425.1	7339.9	6856.8	6143.7
52.5°	6409.8	6533.8	6846.4	7742.9	9303.4	10543.5	9820.1	8554.2	8422.4	7572.4	6582.9
55°	5014.7	5174.9	5689.0	6719.8	8817.7	10951.7	11039.5	9727.1	9427.4	8109.8	6923.9
57.5°	3728.1	3777.2	4376.5	5317.0	7668.0	10551.2	11664.8	10631.3	10246.4	8538.7	7262.4
60°	2322.6	2353.6	2986.6	4048.4	5807.8	9070.9	11664.8	11254.0	10887.1	8923.6	7572.4
62.5°	1444.2	1454.5	1692.2	2774.7	3947.7	6727.6	11181.6	11737.1	11442.6	9200.0	7838.5
65°	831.9	842.2	953.3	1568.2	2568.1	4027.8	9946.7	11879.2	11747.4	9419.6	8045.2
67.5°	607.1	612.3	656.2	881.0	1679.3	2069.4	7471.6	11308.2	11473.6	9528.2	8040.0
70°	527.0	534.8	591.6	687.2	1211.7	1271.1	3803.0	9765.8	10228.3	9373.1	7799.8
72.5°	405.6	416.0	501.2	645.9	888.7	914.6	1377.0	6949.8	7649.9	8404.3	7140.9
75°	279.0	289.4	374.6	532.2	733.7	684.6	757.0	3198.4	4035.5	5637.3	5435.8
77.5°	178.3	180.8	235.1	387.5	633.0	485.7	519.3	1043.8	1464.9	2550.0	2565.5
80°	118.8	121.4	144.7	250.6	434.0	449.5	320.4	483.1	529.6	744.1	516.7
82.5°	72.3	72.3	98.2	157.6	263.5	372.0	209.3	253.2	271.3	286.8	134.3
85°	28.4	28.4	59.4	103.3	165.3	173.1	131.8	147.3	155.0	167.9	62.0
87.5°	7.8	7.8	33.6	56.8	72.3	80.1	80.1	72.3	77.5	95.6	31.0
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°	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2	2108.2
2.5°	2097.8	2090.1	2079.8	2069.4	2059.1	2051.3	2043.6	2043.6	2038.4	2030.7	2025.5
5°	2092.7	2079.8	2056.5	2038.4	2010.0	1989.3	1973.8	1960.9	1953.2	1935.1	1932.5
7.5°	2084.9	2069.4	2035.8	1999.7	1953.2	1917.0	1880.8	1855.0	1829.2	1808.5	1803.3
10°	2072.0	2053.9	2004.8	1953.2	1888.6	1821.4	1736.1	1638.0	1547.5	1495.9	1480.4
12.5°	2072.0	2048.8	1984.2	1914.4	1821.4	1656.1	1439.0	1222.0	1054.1	979.2	958.5
15°	2084.9	2053.9	1968.7	1873.1	1700.0	1364.1	1012.8	726.0	542.5	485.7	472.8
17.5°	2097.8	2053.9	1945.4	1816.2	1477.8	989.5	576.1	382.4	322.9	310.0	310.0
20°	2103.0	2048.8	1914.4	1710.3	1180.7	614.9	343.6	286.8	263.5	255.8	255.8
22.5°	2123.7	2051.3	1891.2	1557.9	857.7	361.7	271.3	240.3	217.0	209.3	209.3
25°	2175.4	2082.3	1896.3	1364.1	550.3	273.9	229.9	198.9	175.7	165.3	165.3
27.5°	2258.0	2152.1	1924.7	1139.3	346.2	235.1	193.8	160.2	142.1	131.8	131.8
30°	2351.0	2229.6	1937.7	881.0	258.4	198.9	157.6	126.6	113.7	105.9	103.3
32.5°	2513.8	2364.0	1927.3	604.6	211.9	167.9	126.6	100.8	90.4	87.8	87.8
35°	2774.7	2599.1	1906.7	379.8	175.7	134.3	100.8	82.7	74.9	72.3	69.8
37.5°	3128.7	2942.7	1844.7	250.6	144.7	105.9	82.7	69.8	62.0	59.4	59.4
40°	3560.1	3335.4	1725.8	191.2	124.0	85.3	69.8	59.4	54.3	51.7	51.7
42.5°	4053.6	3772.0	1537.2	165.3	103.3	72.3	59.4	49.1	46.5	43.9	43.9
45°	4593.6	4229.3	1276.3	147.3	87.8	59.4	49.1	43.9	38.8	38.8	36.2
47.5°	5167.1	4689.2	981.8	129.2	74.9	51.7	43.9	36.2	33.6	31.0	31.0
50°	5720.0	5099.9	689.8	111.1	62.0	43.9	36.2	31.0	28.4	25.8	25.8
52.5°	6110.1	5348.0	488.3	95.6	51.7	38.8	28.4	23.3	20.7	20.7	20.7
55°	6422.7	5503.0	341.0	80.1	43.9	33.6	23.3	18.1	18.1	15.5	15.5
57.5°	6717.2	5603.7	250.6	67.2	36.2	25.8	18.1	12.9	12.9	10.3	10.3
60°	7022.1	5658.0	191.2	54.3	31.0	20.7	12.9	10.3	7.8	7.8	7.8
62.5°	7329.5	5691.6	147.3	43.9	25.8	15.5	10.3	7.8	5.2	2.6	2.6
65°	7598.2	5701.9	113.7	33.6	20.7	10.3	7.8	2.6	0.0	0.0	0.0
67.5°	7678.3	5583.1	87.8	25.8	15.5	7.8	5.2	0.0	0.0	0.0	0.0
70°	7461.3	5267.9	67.2	20.7	12.9	5.2	2.6	0.0	0.0	0.0	0.0
72.5°	6621.7	4417.9	51.7	12.9	10.3	5.2	2.6	0.0	0.0	0.0	0.0
75°	4738.2	2356.2	36.2	10.3	7.8	2.6	0.0	0.0	0.0	0.0	0.0
77.5°	2180.5	912.0	25.8	7.8	5.2	2.6	0.0	0.0	0.0	0.0	0.0
80°	426.3	227.4	10.3	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	98.2	38.8	5.2	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	33.6	12.9	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.9	5.2	2.6	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)