

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: P265641

Luminaire Tested: **ARCH-L-AF72-160-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265641
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-160-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18147.6 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

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

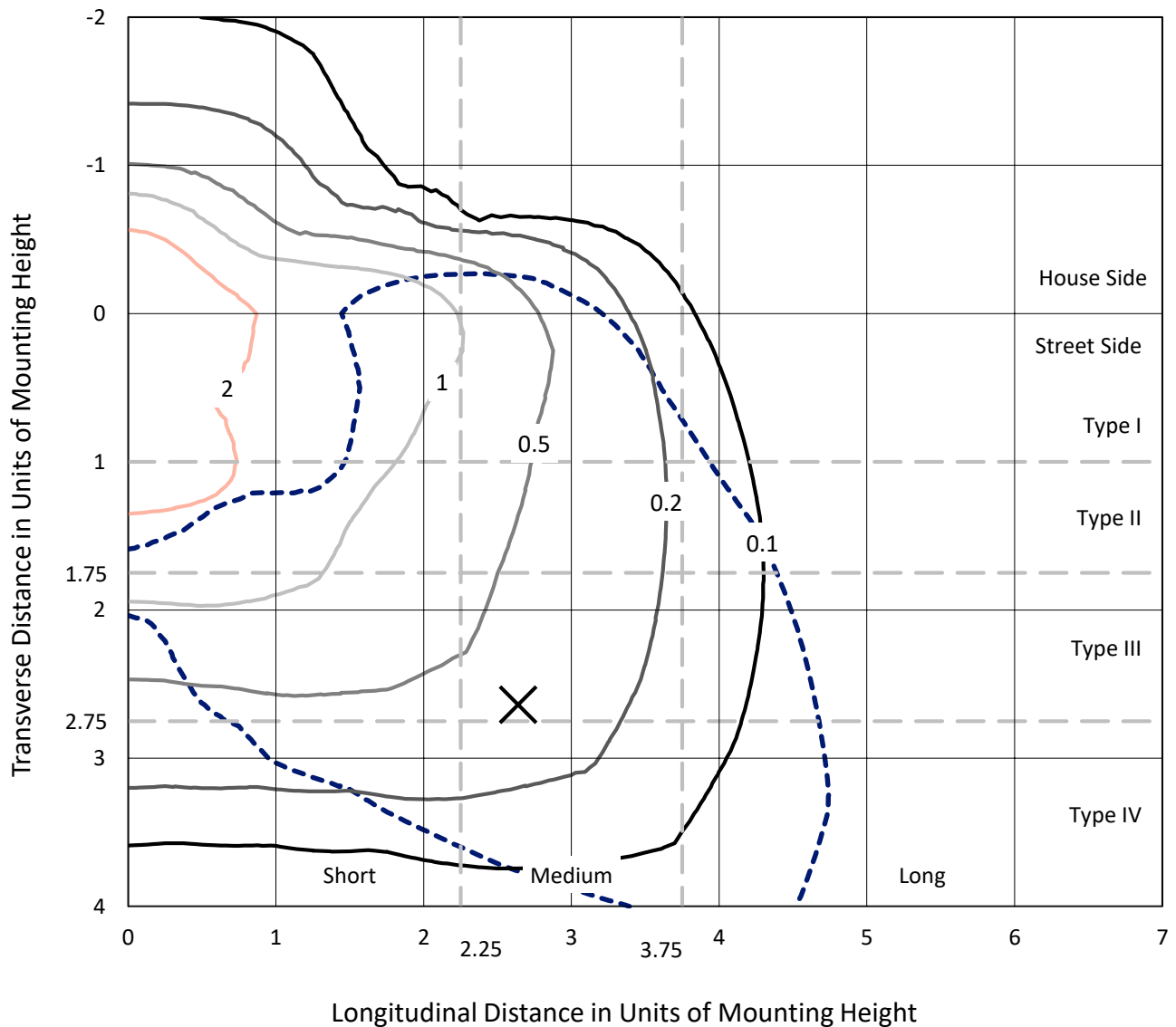


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

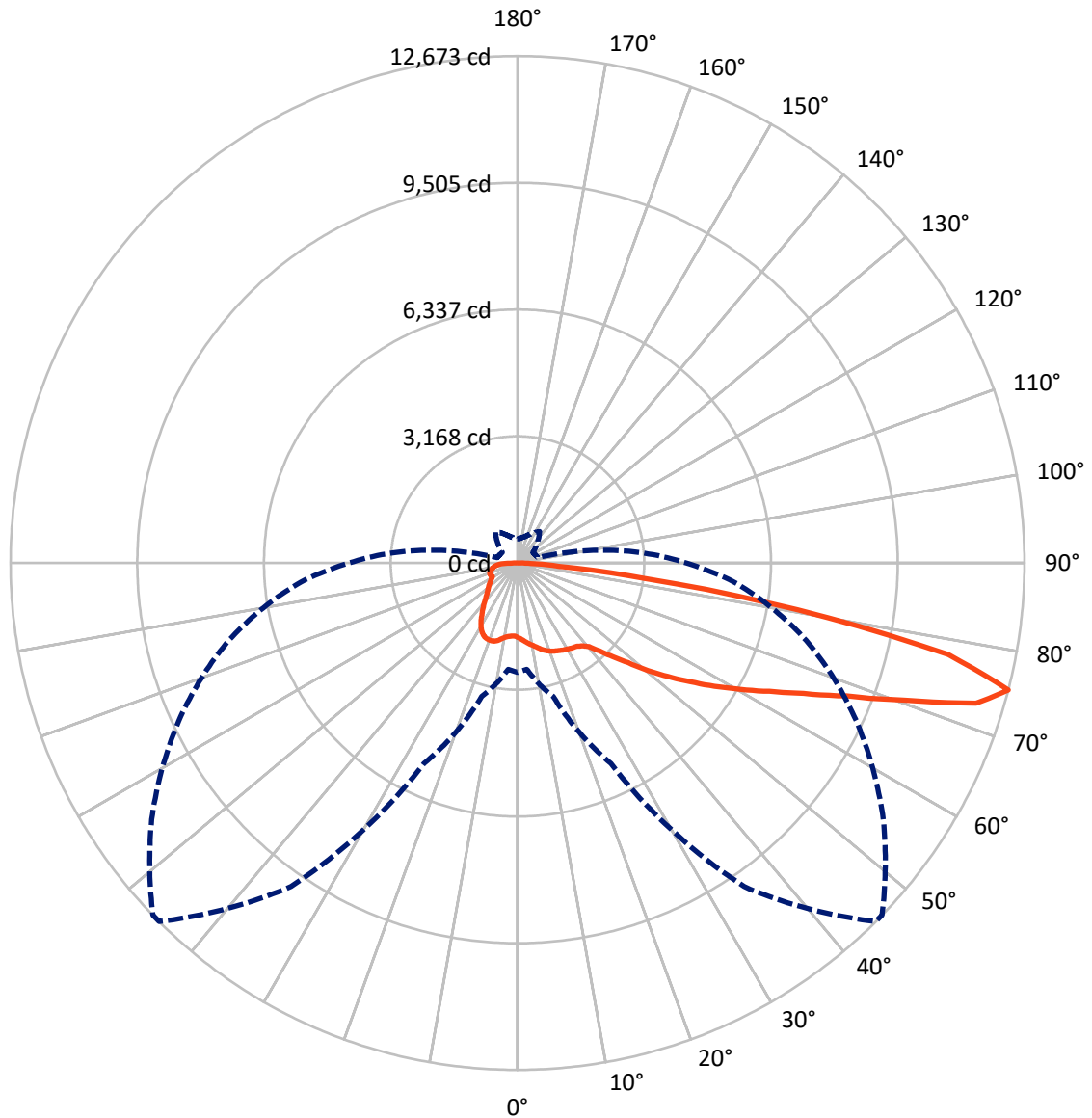


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - Non-Cutoff

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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	4204.1	0.0	4204.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	13943.6	0.0	13943.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	18147.6	0.0	18147.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.4	1.0
10°-20°	597.4	3.3
20°-30°	1025.2	5.6
30°-40°	1433.9	7.9
40°-50°	2103.4	11.6
50°-60°	3276.5	18.1
60°-70°	4714.6	26.0
70°-80°	4106.9	22.6
80°-90°	705.3	3.9
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°	18147.6	100.0
0°-180°	18147.6	100.0

Coefficient of Utilization



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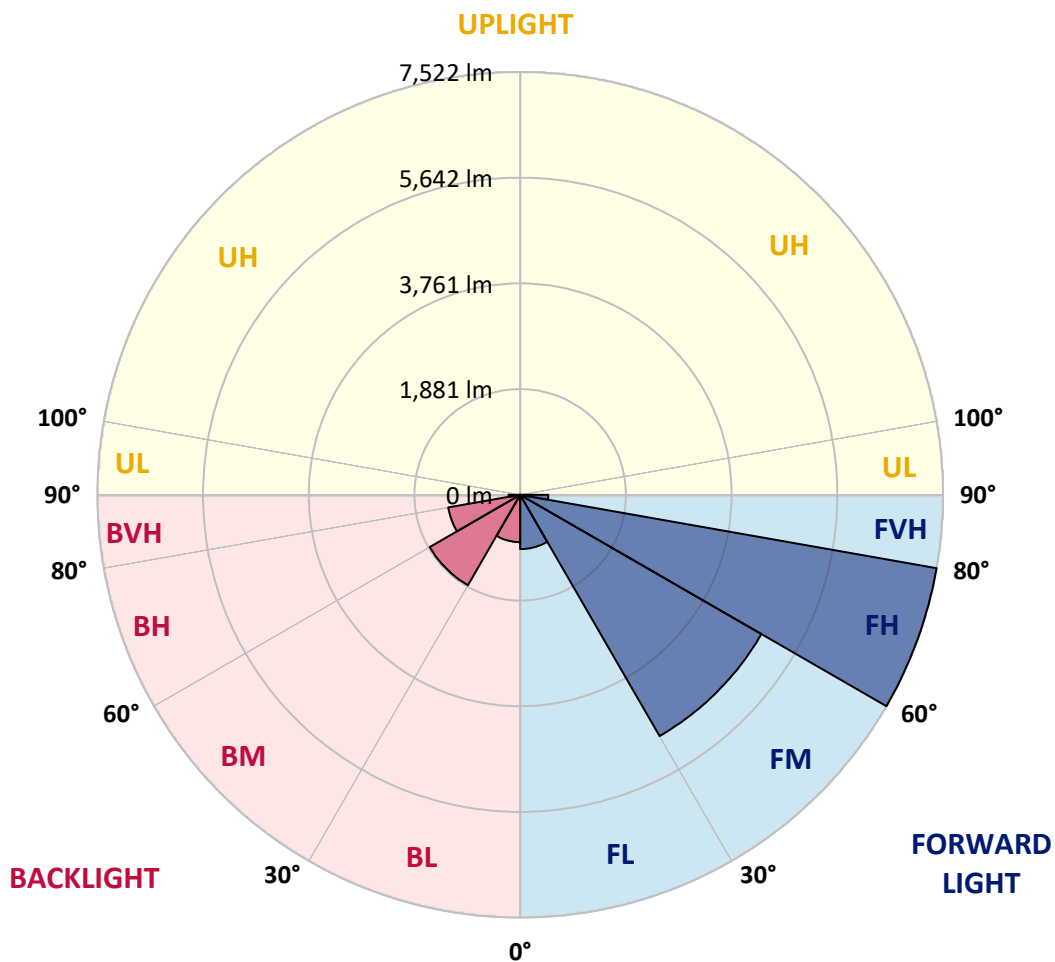
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	965.0	5.3			
FM	(30°-60°)	4955.8	27.3			
FH	(60°-80°)	7522.4	41.5			G4/12000
FVH	(80°-90°)	500.4	2.8			G4/750
BL	(0°-30°)	842.0	4.6	B2/1000		
BM	(30°-60°)	1858.0	10.2	B2/2500		
BH	(60°-80°)	1299.2	7.2	B3/2500		G3/2500
BVH	(80°-90°)	204.9	1.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4
2.5°	1952.1	1938.1	1938.1	1927.5	1927.5	1909.7	1902.7	1899.2	1881.6	1871.0	1860.4
5°	2065.2	2047.4	2044.0	2019.2	2008.7	1969.9	1966.3	1941.5	1909.7	1878.0	1853.4
7.5°	2167.5	2156.9	2139.3	2114.6	2082.8	2033.4	2029.8	1991.1	1938.1	1895.8	1860.4
10°	2241.6	2234.5	2209.9	2178.1	2142.7	2093.4	2089.8	2047.4	1983.9	1934.5	1885.2
12.5°	2329.9	2319.3	2287.5	2245.1	2206.3	2160.5	2156.9	2121.5	2051.0	1987.5	1923.9
15°	2414.6	2400.5	2361.6	2319.3	2276.9	2238.0	2238.0	2199.3	2125.1	2051.0	1976.9
17.5°	2457.0	2449.9	2411.1	2365.1	2329.9	2301.6	2298.1	2262.8	2188.7	2111.0	2029.8
20°	2471.1	2474.7	2439.3	2389.9	2365.1	2351.0	2347.5	2322.8	2241.6	2167.5	2089.8
22.5°	2467.6	2478.2	2449.9	2396.9	2389.9	2389.9	2389.9	2361.6	2298.1	2224.1	2146.3
25°	2481.7	2495.9	2474.7	2411.1	2411.1	2425.2	2425.2	2411.1	2354.5	2291.0	2213.5
27.5°	2531.2	2541.8	2524.1	2435.8	2439.3	2460.5	2457.0	2460.5	2425.2	2365.1	2287.5
30°	2591.2	2605.3	2584.1	2474.7	2471.1	2492.3	2492.3	2510.0	2485.3	2421.7	2358.1
32.5°	2753.6	2750.0	2682.9	2517.1	2506.5	2527.7	2527.7	2545.3	2531.2	2481.7	2421.7
35°	3237.1	3184.2	3035.9	2654.8	2548.9	2559.4	2559.4	2591.2	2598.2	2559.4	2506.5
37.5°	3731.4	3713.8	3600.8	3021.8	2704.1	2626.5	2623.0	2668.8	2700.6	2668.8	2633.6
40°	4229.1	4214.9	4190.2	3512.6	3028.8	2746.5	2735.9	2774.7	2831.2	2810.0	2788.8
42.5°	4691.6	4684.5	4709.3	3996.1	3441.9	3004.1	2972.4	2926.5	3007.6	3000.6	3000.6
45°	5055.1	5072.8	5086.9	4448.0	3890.2	3335.9	3297.1	3141.8	3251.2	3279.5	3300.7
47.5°	5259.9	5273.9	5323.4	4889.3	4338.5	3720.8	3692.6	3438.4	3583.1	3667.8	3727.8
50°	5553.0	5514.1	5556.5	5319.9	4878.6	4222.0	4144.4	3837.3	4020.9	4169.2	4310.2
52.5°	5835.3	5771.8	5807.2	5817.7	5492.9	4712.8	4631.5	4306.7	4536.3	4769.2	5019.9
55°	6089.5	6085.9	6121.3	6301.3	6085.9	5238.7	5147.0	4825.8	5157.6	5408.2	5831.7
57.5°	6294.2	6329.5	6484.9	6862.6	6770.9	5810.6	5708.2	5429.4	5821.1	6071.9	6774.4
60°	6534.4	6590.8	6848.5	7339.2	7395.7	6410.8	6304.8	6103.7	6502.6	6756.7	7865.2
62.5°	6615.5	6696.7	7226.1	7840.4	8048.8	7067.3	6972.0	6837.9	7219.1	7448.6	8952.5
65°	6075.3	6230.7	7434.6	8098.1	8751.2	7858.2	7776.8	7660.3	7932.3	8084.0	9690.2
67.5°	5927.0	5997.8	7028.5	8468.9	9411.4	8874.7	8793.6	8592.4	8599.5	8535.9	9930.4
70°	5718.8	5796.6	6612.0	8747.6	10357.5	10265.7	10166.7	9573.7	9210.1	8825.4	9457.3
72.5°	4871.6	4846.9	5697.7	7995.8	10812.8	11988.4	11871.9	10629.3	9662.0	8574.7	7981.7
75°	2735.9	2665.2	3456.0	5531.8	9873.8	12673.2	12669.7	11162.2	9344.3	7469.8	5432.9
77.5°	794.3	773.1	1140.3	2319.3	6647.3	11010.5	11144.6	10067.9	7798.0	5365.8	2983.0
80°	374.2	381.2	490.7	766.1	2838.3	7106.2	7491.0	6629.6	4659.8	2474.7	1232.0
82.5°	236.6	240.0	335.3	494.2	1200.2	3226.5	3544.3	2983.0	1846.2	1069.6	543.7
85°	148.3	148.3	222.4	324.7	716.6	1030.8	1119.1	1016.7	790.8	582.6	296.5
87.5°	81.1	81.1	134.1	187.0	391.8	331.8	342.4	405.9	494.2	356.5	148.3
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°	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4	1860.4
2.5°	1856.8	1849.8	1839.2	1835.6	1832.2	1828.6	1832.2	1839.2	1832.2	1832.2	1835.6
5°	1846.2	1839.2	1825.0	1825.0	1828.6	1832.2	1849.8	1860.4	1864.0	1864.0	1864.0
7.5°	1846.2	1835.6	1825.0	1828.6	1835.6	1849.8	1878.0	1895.8	1909.7	1913.3	1913.3
10°	1864.0	1849.8	1842.8	1849.8	1871.0	1881.6	1909.7	1938.1	1955.7	1962.7	1962.7
12.5°	1895.8	1881.6	1881.6	1895.8	1923.9	1938.1	1962.7	1983.9	2005.1	2015.6	2015.6
15°	1948.7	1930.9	1934.5	1959.3	1991.1	2005.1	2022.8	2029.8	2047.4	2061.6	2061.6
17.5°	1998.1	1980.5	1987.5	2015.6	2036.8	2044.0	2054.6	2051.0	2058.0	2068.6	2072.2
20°	2054.6	2036.8	2040.4	2058.0	2061.6	2054.6	2054.6	2044.0	2040.4	2058.0	2065.2
22.5°	2111.0	2093.4	2089.8	2079.2	2061.6	2044.0	2033.4	2022.8	2015.6	2033.4	2040.4
25°	2178.1	2153.3	2135.7	2089.8	2044.0	2012.2	1998.1	1991.1	1987.5	2005.1	2012.2
27.5°	2252.2	2227.4	2174.5	2075.8	2001.7	1948.7	1938.1	1938.1	1945.1	1955.7	1962.7
30°	2322.8	2298.1	2202.9	2044.0	1927.5	1849.8	1839.2	1849.8	1867.4	1878.0	1888.6
32.5°	2393.4	2368.7	2220.5	1994.5	1818.0	1719.1	1712.1	1729.7	1758.1	1765.1	1772.1
35°	2488.8	2464.1	2241.6	1923.9	1680.4	1574.5	1567.5	1578.0	1602.7	1613.3	1623.9
37.5°	2623.0	2608.8	2273.4	1846.2	1553.3	1436.7	1415.5	1408.5	1422.6	1419.1	1433.2
40°	2799.4	2810.0	2329.9	1743.9	1429.7	1309.6	1263.7	1242.6	1228.5	1200.2	1214.4
42.5°	3057.1	3064.2	2393.4	1627.4	1323.8	1189.6	1129.7	1090.8	1062.5	1016.7	1023.8
45°	3434.8	3374.8	2467.6	1503.9	1228.5	1094.3	1023.8	977.8	939.0	900.2	903.8
47.5°	3936.2	3752.5	2548.9	1401.4	1133.2	1016.7	953.1	900.2	854.3	822.5	826.0
50°	4553.9	4222.0	2630.0	1306.1	1037.8	956.7	900.2	843.7	797.9	766.1	762.5
52.5°	5369.3	4786.9	2682.9	1200.2	942.5	903.8	854.3	801.4	744.9	706.1	702.6
55°	6216.6	5443.5	2728.8	1073.1	850.8	843.7	819.0	759.0	692.0	642.5	635.5
57.5°	7148.5	6145.9	2764.2	949.6	780.2	794.3	787.3	716.6	642.5	596.7	593.2
60°	7995.8	6873.2	2651.2	840.2	716.6	744.9	751.9	692.0	653.1	663.7	667.3
62.5°	8850.1	7434.6	2220.5	759.0	674.3	713.1	773.1	769.6	751.9	769.6	773.1
65°	9157.2	7551.0	1574.5	692.0	631.9	727.2	840.2	833.1	751.9	720.1	713.1
67.5°	8984.2	7205.0	1059.0	639.0	600.1	744.9	910.8	833.1	723.7	681.4	667.3
70°	8161.7	6354.3	776.7	586.1	572.0	741.3	949.6	829.6	709.5	663.7	646.1
72.5°	6509.6	4903.4	624.9	536.6	529.6	723.7	970.8	822.5	695.5	646.1	624.9
75°	4214.9	3050.0	526.0	487.2	466.0	695.5	960.2	801.4	677.9	614.3	600.1
77.5°	1955.7	1313.2	448.3	430.6	405.9	653.1	928.4	759.0	639.0	579.0	561.4
80°	910.8	621.3	377.7	374.2	363.6	617.8	886.1	709.5	593.2	543.7	515.4
82.5°	487.2	374.2	307.1	307.1	317.7	575.5	833.1	649.6	533.1	508.4	434.2
85°	257.8	215.4	222.4	240.0	271.7	508.4	762.5	586.1	466.0	388.2	377.7
87.5°	130.7	137.7	137.7	162.5	208.2	413.0	628.4	483.6	395.3	317.7	310.6
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)