

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: P399611

Luminaire Tested: **ARCH-L-PA3-160-830-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399611
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
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-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19806 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

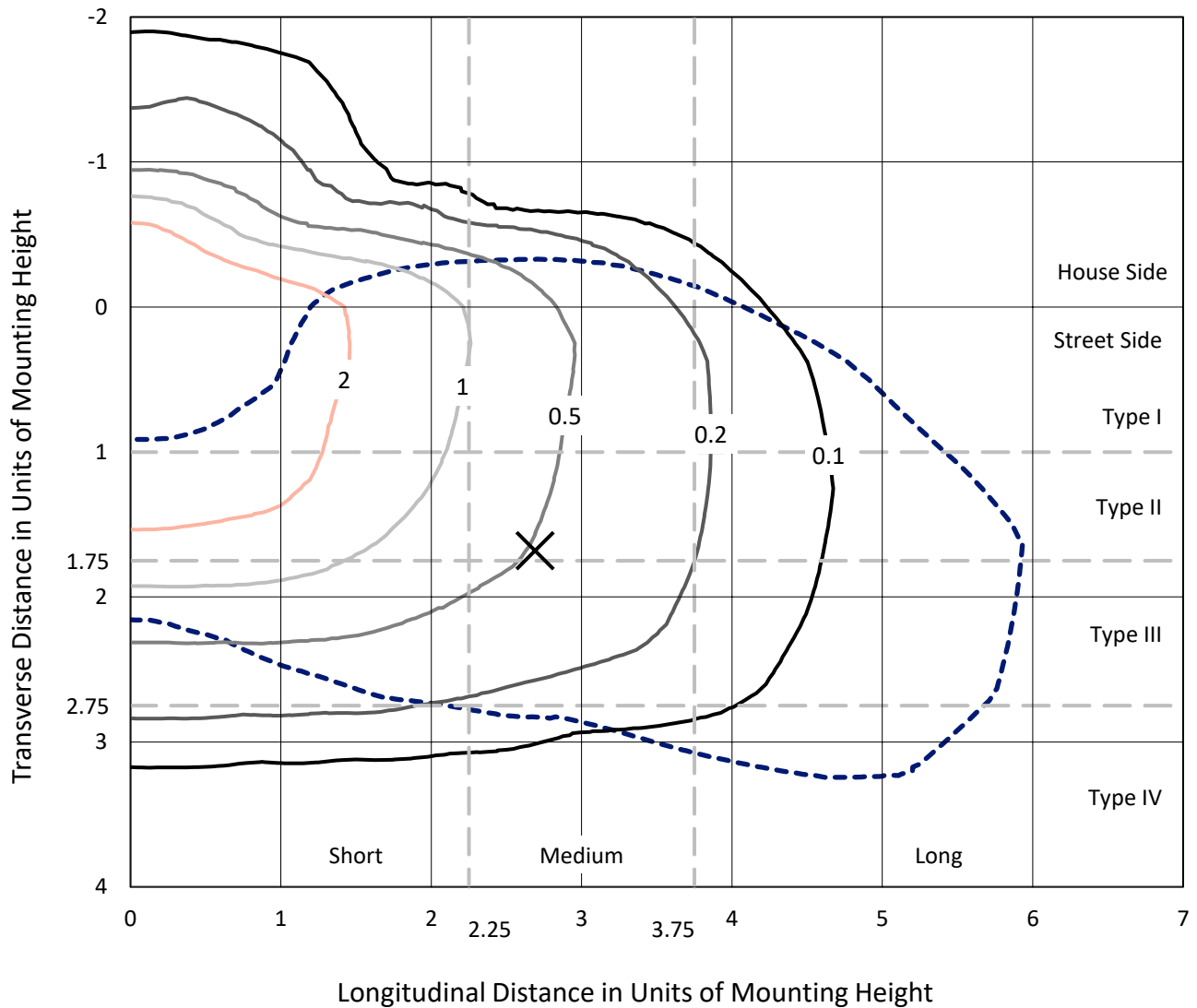
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

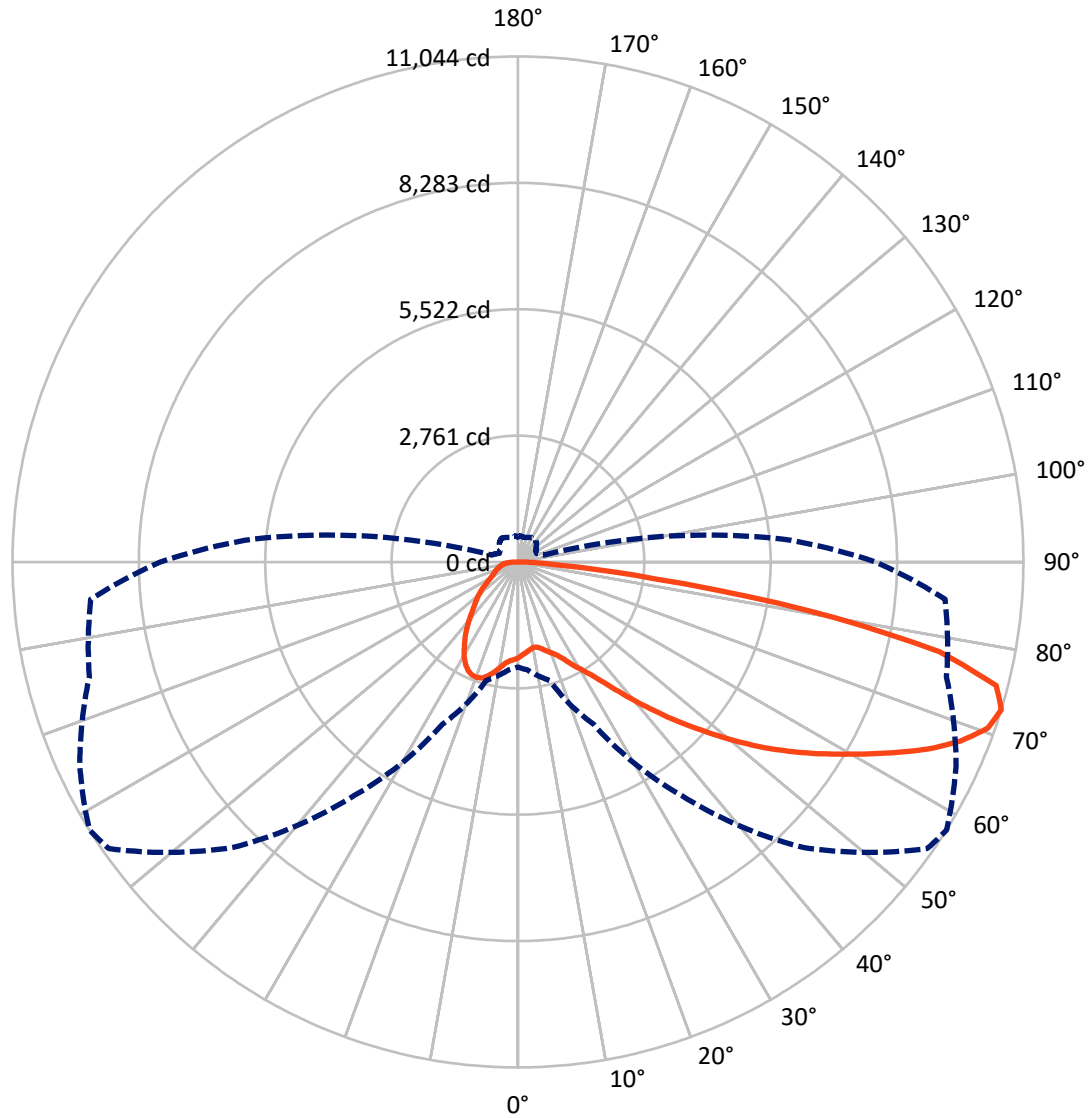
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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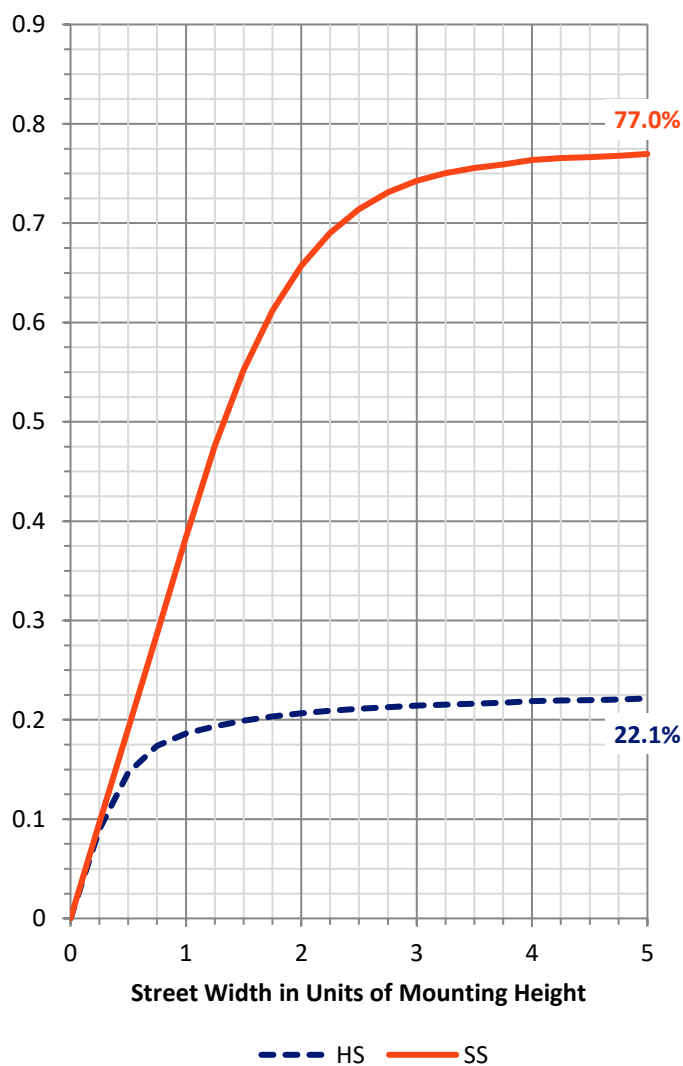
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4491.8	0.0	4491.8
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	15314.2	0.0	15314.2
	% Fixture	77.3	0.0	77.3
Total	Lumens	19806.0	0.0	19806.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.2	1.0
10°-20°	639.1	3.2
20°-30°	1144.9	5.8
30°-40°	1722.2	8.7
40°-50°	2788.8	14.1
50°-60°	4198.1	21.2
60°-70°	4940.7	24.9
70°-80°	3503.4	17.7
80°-90°	667.6	3.4
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°	19806.0	100.0
0°-180°	19806.0	100.0

Coefficient of Utilization

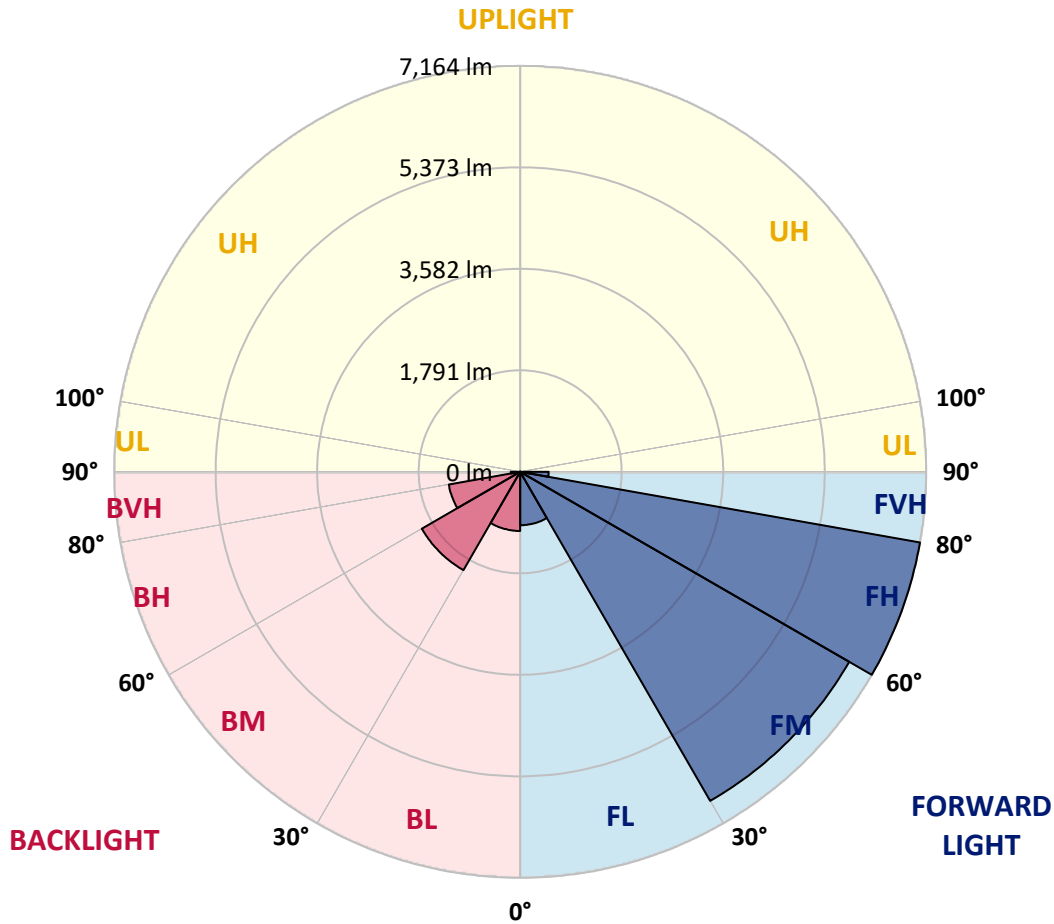


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	941.9	4.8			
FM (30°-60°)	6704.9	33.9			
FH (60°-80°)	7163.9	36.2			G3/7500
FVH (80°-90°)	503.5	2.5			G4/750
BL (0°-30°)	1043.4	5.3	B3/2500		
BM (30°-60°)	2004.2	10.1	B2/2500		
BH (60°-80°)	1280.2	6.5	B3/2500		G3/2500
BVH (80°-90°)	164.0	0.8			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°	55°	58°	65°	75°	85°
0°	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1
2.5°	2010.7	2000.2	2002.8	2002.8	2013.3	2018.5	2021.1	2029.0	2034.2	2047.3	2065.6
5°	1916.5	1908.7	1911.3	1913.9	1932.2	1950.5	1966.2	1976.7	1992.4	2013.3	2039.4
7.5°	1848.6	1843.3	1845.9	1851.2	1866.9	1887.8	1913.9	1929.6	1953.1	1992.4	2036.8
10°	1798.9	1798.9	1801.5	1812.0	1827.6	1853.8	1874.7	1893.0	1940.1	2010.7	2078.7
12.5°	1759.7	1759.7	1767.5	1788.4	1814.6	1840.7	1890.4	1911.3	1974.1	2070.8	2151.9
15°	1757.1	1759.7	1762.3	1780.6	1809.3	1866.9	1940.1	1971.5	2047.3	2162.3	2256.5
17.5°	1798.9	1801.5	1791.0	1796.3	1830.3	1911.3	2008.1	2044.7	2141.4	2266.9	2363.7
20°	1927.0	1927.0	1895.6	1866.9	1890.4	1979.3	2089.1	2125.7	2232.9	2371.5	2468.2
22.5°	2188.5	2201.5	2128.3	2065.6	2029.0	2078.7	2178.0	2217.2	2337.5	2486.5	2583.3
25°	2504.8	2517.9	2418.6	2329.7	2261.7	2253.8	2319.2	2361.0	2460.4	2614.7	2695.7
27.5°	2810.8	2787.2	2695.7	2612.0	2525.8	2455.2	2504.8	2541.4	2656.5	2774.2	2823.8
30°	3051.3	3033.0	2944.1	2884.0	2802.9	2711.4	2682.6	2721.9	2816.0	2925.8	2951.9
32.5°	3318.0	3304.9	3216.0	3137.6	3069.6	2983.3	2920.6	2938.9	2991.2	3069.6	3085.3
35°	3657.9	3686.7	3592.5	3433.0	3357.2	3273.6	3229.1	3234.3	3273.6	3323.2	3297.1
37.5°	4016.1	4050.1	4055.3	3804.3	3702.4	3626.5	3579.5	3597.8	3644.8	3678.8	3597.8
40°	4680.2	4646.2	4510.3	4324.6	4167.8	4094.6	4029.2	4026.6	4060.6	4120.7	3974.3
42.5°	5561.4	5530.0	5255.5	5014.9	4766.5	4682.9	4554.7	4499.8	4515.5	4591.3	4387.4
45°	6405.9	6392.8	6173.2	5893.4	5595.4	5433.3	5140.4	5007.1	4994.0	5054.1	4811.0
47.5°	7156.3	7098.8	6939.3	6722.3	6690.9	6267.3	5728.7	5548.3	5485.6	5519.5	5247.6
50°	7959.0	7762.9	7543.3	7409.9	7637.4	7242.6	6322.2	6134.0	5979.7	6003.3	5720.9
52.5°	8385.2	8055.8	7912.0	7951.2	8257.1	8105.4	6968.1	6738.0	6489.6	6523.6	6191.5
55°	8019.2	8016.5	8079.3	8322.5	8748.6	8573.5	7582.5	7323.7	7051.7	7059.6	6732.7
57.5°	7517.1	7619.1	7943.3	8479.3	9357.9	9065.0	8186.5	7912.0	7663.6	7624.3	7347.2
60°	7059.6	7172.0	7642.6	8453.2	9569.6	9514.7	8761.7	8521.2	8319.8	8204.8	7993.0
62.5°	6364.1	6447.7	7114.5	8285.9	9391.9	9839.0	9344.8	9180.1	9028.4	8790.5	8688.5
65°	5545.7	5574.5	6277.8	7734.2	9169.6	9964.5	9925.2	9852.0	9705.6	9355.2	9376.2
67.5°	4659.3	4716.8	5333.9	6853.0	8683.3	9906.9	10375.0	10435.1	10262.5	9737.0	9815.4
70°	3715.4	3786.0	4254.0	5634.6	7857.0	9658.5	10790.7	10887.4	10555.4	9862.5	9896.5
72.5°	2298.3	2366.3	2680.0	3914.1	6228.1	8824.5	10918.8	11044.3	10563.2	9695.2	9368.3
75°	794.9	802.7	1048.5	1877.3	3697.1	6662.1	10500.5	10795.9	10231.2	9085.9	8152.5
77.5°	363.4	376.5	465.4	773.9	1639.4	3595.2	8670.2	9410.2	9221.9	8134.2	6275.2
80°	251.0	256.2	321.6	462.8	946.5	1265.5	5472.5	6437.3	6766.7	6298.7	4021.3
82.5°	188.3	193.5	248.4	313.8	682.4	614.4	2083.9	2991.2	3718.0	3650.1	1681.2
85°	180.4	177.8	193.5	209.2	455.0	366.1	674.6	925.6	1451.1	1242.0	423.6
87.5°	78.4	86.3	198.7	117.7	237.9	170.0	292.8	342.5	441.9	384.4	151.7
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°	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1	2089.1
2.5°	2073.4	2078.7	2094.3	2117.9	2130.9	2157.1	2175.4	2185.9	2193.7	2196.3	2196.3
5°	2055.1	2065.6	2099.6	2138.8	2175.4	2230.3	2280.0	2308.7	2329.7	2337.5	2340.1
7.5°	2060.4	2086.5	2136.2	2193.7	2240.8	2311.4	2371.5	2429.0	2476.1	2494.4	2494.4
10°	2110.0	2146.6	2214.6	2290.4	2350.6	2423.8	2486.5	2536.2	2591.1	2622.5	2627.7
12.5°	2185.9	2230.3	2319.2	2402.9	2470.9	2528.4	2585.9	2622.5	2648.6	2672.2	2677.4
15°	2293.1	2348.0	2436.9	2523.1	2583.3	2619.9	2635.6	2635.6	2633.0	2635.6	2640.8
17.5°	2400.3	2452.5	2541.4	2627.7	2656.5	2635.6	2617.3	2612.0	2609.4	2604.2	2606.8
20°	2504.8	2554.5	2630.3	2695.7	2672.2	2599.0	2575.4	2572.8	2565.0	2559.8	2554.5
22.5°	2609.4	2646.0	2708.8	2732.3	2638.2	2533.6	2504.8	2489.2	2478.7	2465.6	2452.5
25°	2729.7	2740.2	2787.2	2750.6	2554.5	2413.3	2371.5	2348.0	2337.5	2324.4	2314.0
27.5°	2842.1	2842.1	2850.0	2721.9	2431.6	2253.8	2191.1	2149.2	2146.6	2144.0	2141.4
30°	2944.1	2931.0	2904.9	2635.6	2272.1	2057.7	1963.6	1921.8	1937.5	1950.5	1953.1
32.5°	3064.4	3038.2	2965.0	2517.9	2081.3	1838.1	1723.1	1704.8	1723.1	1738.7	1728.3
35°	3252.6	3205.6	3027.8	2382.0	1898.2	1636.8	1527.0	1500.8	1495.6	1493.0	1472.1
37.5°	3521.9	3440.9	3077.5	2235.5	1717.8	1459.0	1377.9	1323.0	1273.3	1221.0	1213.2
40°	3851.4	3712.8	3111.4	2068.2	1527.0	1309.9	1223.7	1153.1	1069.4	977.9	967.4
42.5°	4212.2	4005.7	3127.1	1882.6	1359.6	1187.1	1079.9	991.0	896.8	826.2	813.2
45°	4601.8	4322.0	3114.1	1704.8	1223.7	1082.5	962.2	865.5	789.6	739.9	729.5
47.5°	4980.9	4685.5	3077.5	1563.6	1119.1	993.6	870.7	781.8	724.3	669.4	656.3
50°	5467.3	5033.2	3033.0	1453.7	1004.0	904.7	813.2	719.0	653.7	627.5	622.3
52.5°	6005.9	5381.0	2980.7	1315.2	891.6	834.1	776.6	692.9	672.0	622.3	614.4
55°	6588.9	5794.1	2970.3	1140.0	792.2	784.4	739.9	716.4	721.6	622.3	609.2
57.5°	7203.4	6236.0	2993.8	964.8	711.2	739.9	755.6	737.3	729.5	635.4	609.2
60°	7844.0	6662.1	2923.2	802.7	648.4	703.3	773.9	726.9	669.4	630.1	611.8
62.5°	8466.3	7020.4	2617.3	687.7	601.4	692.9	763.5	687.7	622.3	622.3	614.4
65°	8918.6	7179.9	2047.3	604.0	570.0	679.8	745.2	661.5	609.2	627.5	617.1
67.5°	8970.9	7015.1	1375.3	538.6	543.8	656.3	703.3	638.0	596.1	643.2	627.5
70°	8649.3	6586.3	841.9	488.9	509.9	614.4	666.7	614.4	577.8	630.1	606.6
72.5°	7815.2	5786.2	593.5	447.1	473.3	575.2	632.7	593.5	551.7	570.0	546.5
75°	6411.1	4484.1	470.6	407.9	436.6	538.6	604.0	562.2	520.3	512.5	496.8
77.5°	4541.7	2873.5	379.1	376.5	397.4	494.2	564.8	525.5	483.7	468.0	457.6
80°	2612.0	1409.3	326.8	339.9	360.8	449.7	517.7	483.7	444.5	421.0	405.3
82.5°	998.8	491.6	287.6	295.5	319.0	402.7	470.6	441.9	402.7	423.6	355.6
85°	324.2	269.3	235.3	243.2	266.7	334.7	415.7	392.2	347.7	308.5	285.0
87.5°	143.8	146.4	125.5	138.6	167.3	222.2	303.3	287.6	253.6	211.8	203.9
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)