

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: P265648

Luminaire Tested: **ARCH-L-AF72-170-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265648
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-170-D-U-T3-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19097.6 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

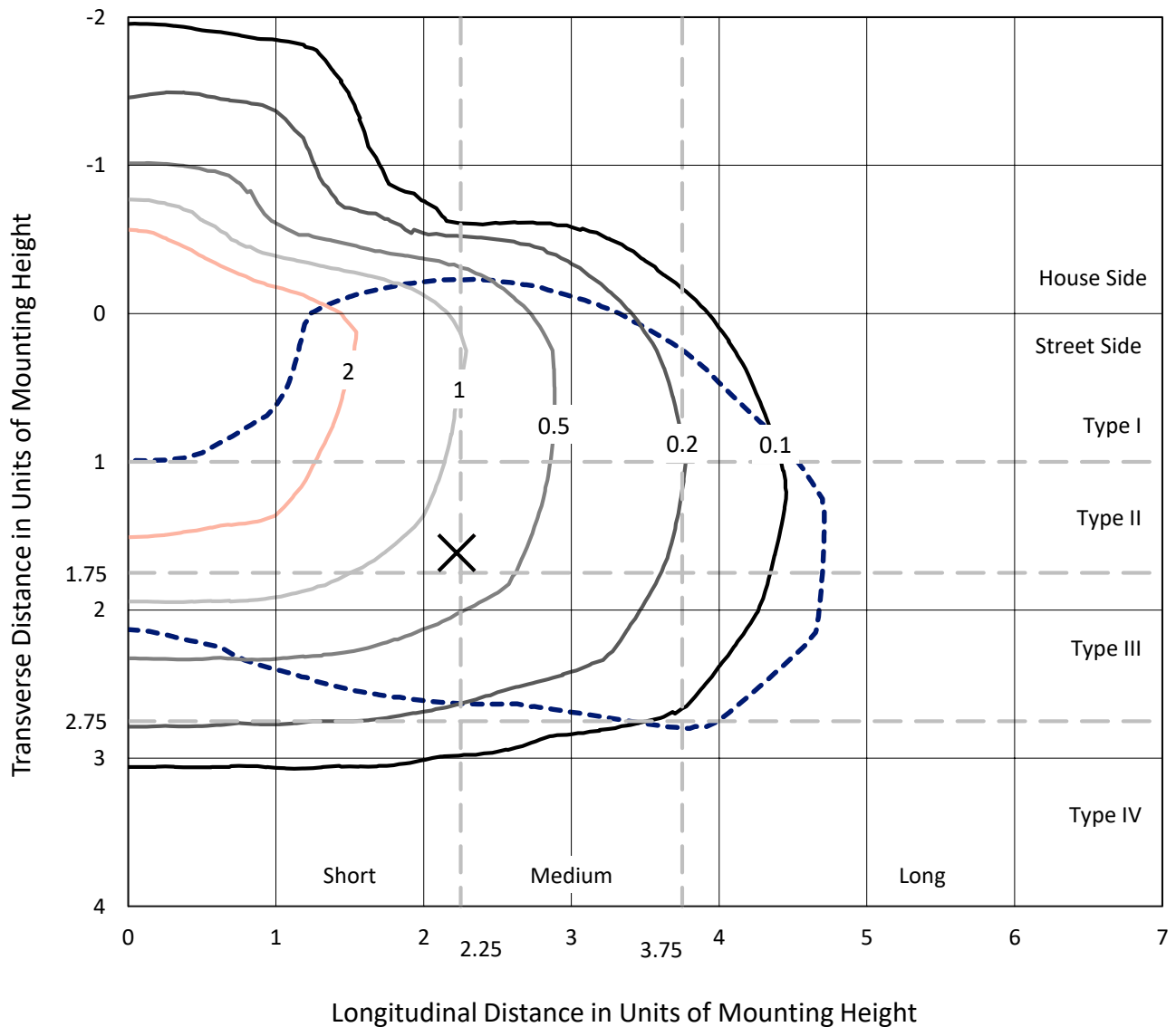
Input Watts (W): 173
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

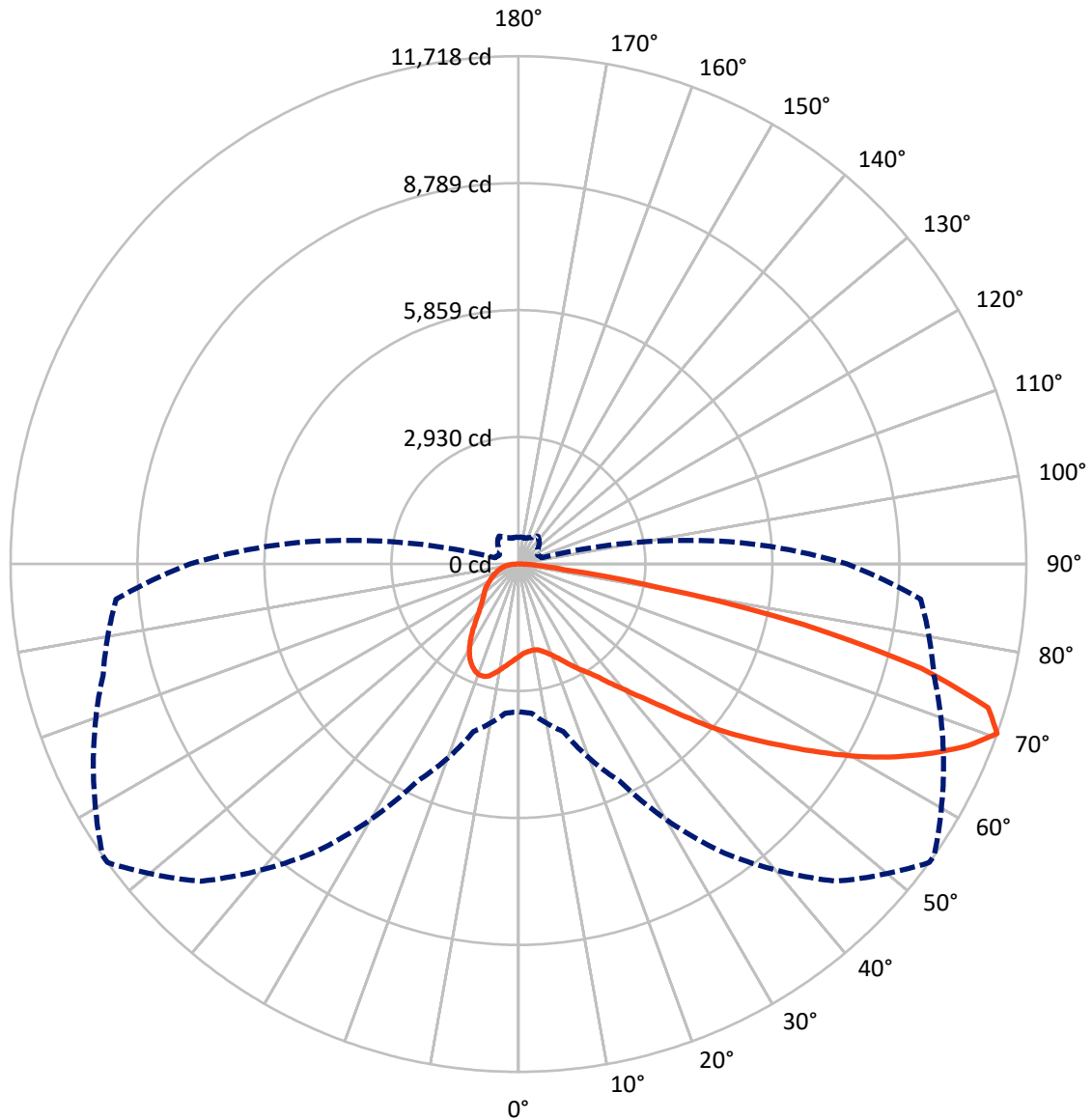
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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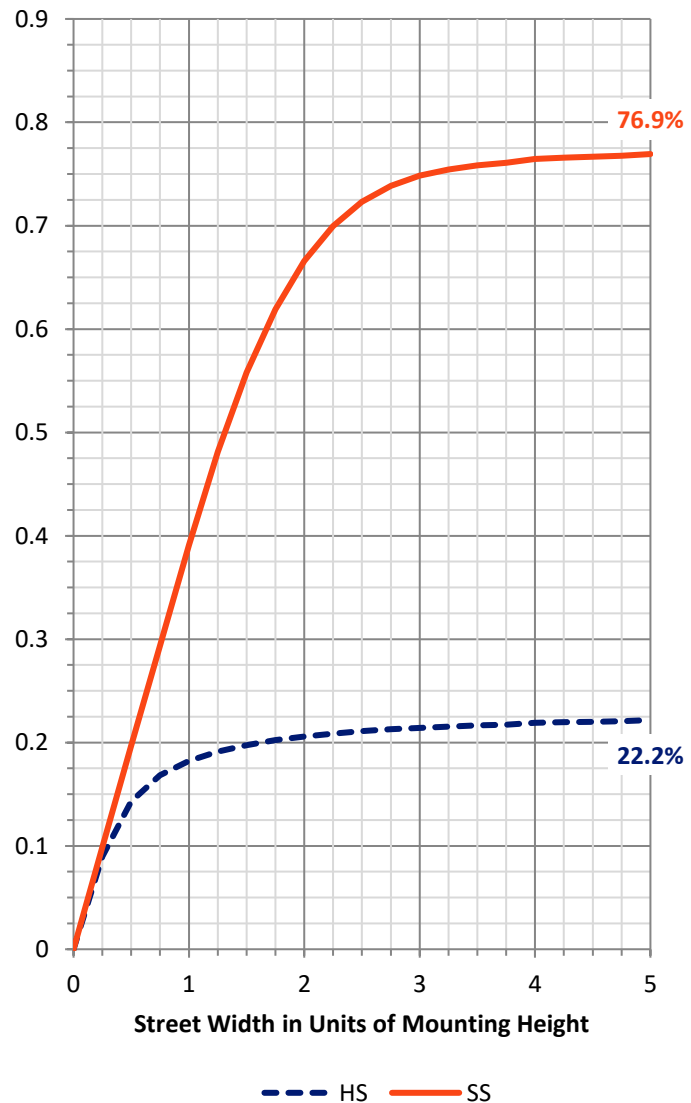
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4331.3	0.0	4331.3
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	14766.4	0.0	14766.4
	% Fixture	77.3	0.0	77.3
Total	Lumens	19097.6	0.0	19097.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.7	1.1
10°-20°	670.0	3.5
20°-30°	1164.0	6.1
30°-40°	1701.1	8.9
40°-50°	2669.8	14.0
50°-60°	4105.5	21.5
60°-70°	5015.9	26.3
70°-80°	3109.9	16.3
80°-90°	451.8	2.4
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°	19097.6	100.0
0°-180°	19097.6	100.0

Coefficient of Utilization



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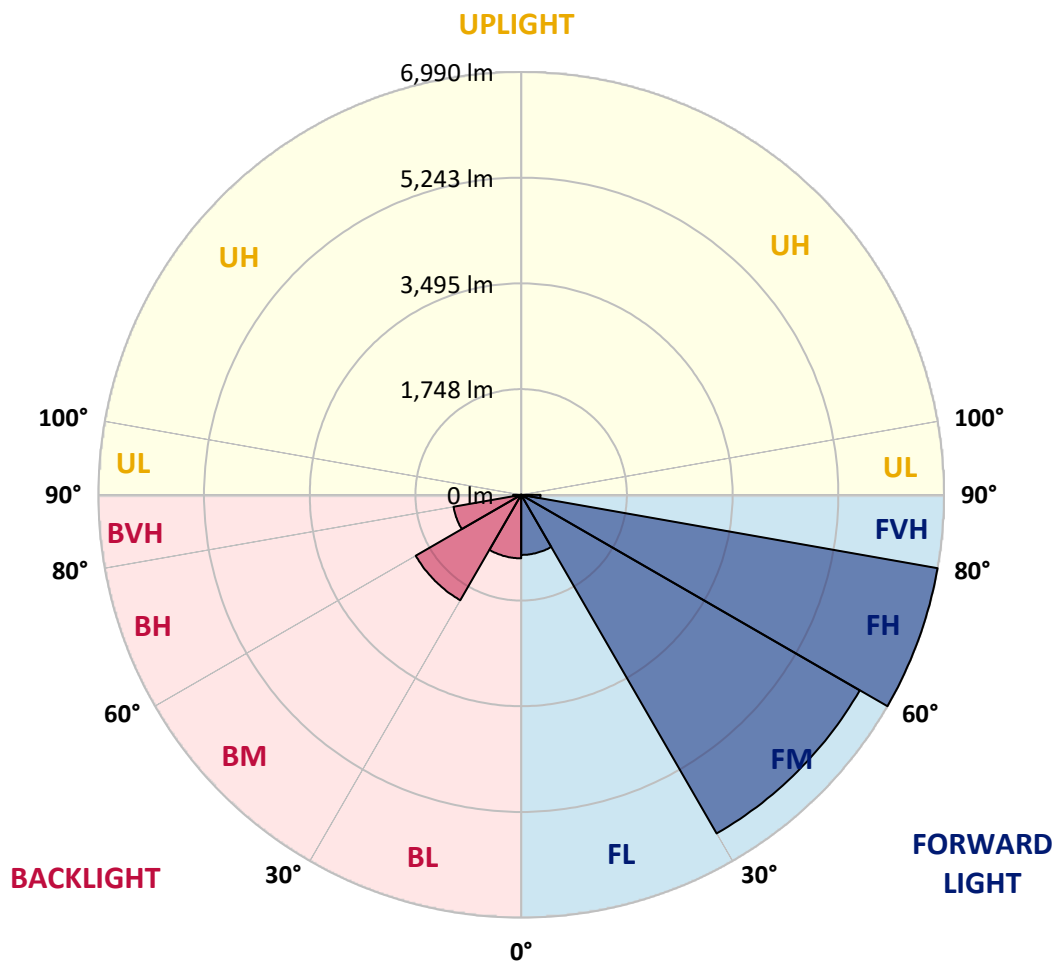
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	993.6	5.2			
FM	(30°-60°)	6463.7	33.8			
FH	(60°-80°)	6990.0	36.6			G3/7500
FVH	(80°-90°)	319.0	1.7			G3/500
BL	(0°-30°)	1050.1	5.5	B3/2500		
BM	(30°-60°)	2012.7	10.5	B2/2500		
BH	(60°-80°)	1135.8	5.9	B3/2500		G3/2500
BVH	(80°-90°)	132.8	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7
2.5°	2052.6	2045.7	2045.7	2056.2	2059.8	2070.2	2070.2	2073.6	2084.2	2101.7	2122.7
5°	1989.7	1986.3	1989.7	2003.8	2010.8	2031.7	2038.8	2042.2	2063.1	2091.2	2122.7
7.5°	1926.9	1923.4	1930.3	1951.3	1972.3	2003.8	2021.2	2024.7	2056.2	2094.7	2136.7
10°	1905.8	1902.3	1912.9	1930.3	1951.3	1986.3	2014.3	2017.8	2063.1	2108.7	2168.1
12.5°	1933.8	1930.3	1940.8	1958.2	1979.2	2003.8	2035.2	2038.8	2098.3	2157.5	2220.6
15°	2003.8	2003.8	2007.3	2017.8	2038.8	2059.8	2087.8	2091.2	2154.1	2224.1	2287.1
17.5°	2112.2	2105.2	2105.2	2101.7	2115.7	2126.2	2161.1	2164.6	2231.1	2294.0	2357.0
20°	2245.0	2241.5	2227.5	2210.1	2206.5	2213.6	2248.5	2252.1	2318.4	2370.9	2430.4
22.5°	2405.9	2409.4	2378.0	2339.5	2321.9	2332.4	2363.9	2367.5	2416.4	2461.8	2514.4
25°	2619.2	2608.8	2563.3	2507.3	2472.3	2472.3	2503.8	2503.8	2549.3	2577.2	2612.2
27.5°	2822.0	2801.1	2759.1	2678.7	2622.7	2633.2	2664.7	2664.7	2706.7	2717.2	2734.6
30°	3042.4	3021.4	2968.9	2867.5	2794.1	2787.1	2825.6	2822.0	2878.0	2874.4	2860.6
32.5°	3311.6	3301.1	3213.6	3084.3	2986.4	2961.9	2996.8	3000.3	3035.4	3024.9	2979.4
35°	3689.2	3685.7	3605.3	3378.0	3248.7	3203.3	3224.1	3224.1	3248.7	3220.8	3143.8
37.5°	4164.9	4171.9	4101.9	3766.2	3584.3	3507.4	3510.9	3507.4	3514.4	3483.0	3402.5
40°	4640.5	4657.9	4654.5	4248.9	4017.9	3885.1	3836.1	3829.1	3846.6	3832.7	3755.8
42.5°	5266.5	5308.4	5210.4	4843.3	4584.5	4360.7	4227.9	4210.4	4248.9	4266.3	4192.8
45°	5916.9	5902.9	5749.1	5483.3	5248.9	4962.1	4710.4	4682.4	4710.4	4762.9	4685.9
47.5°	6256.1	6245.6	6207.1	6074.2	6039.2	5710.5	5329.4	5304.9	5252.4	5326.0	5235.0
50°	6815.6	6826.1	6668.7	6654.7	6801.5	6619.7	6028.7	5972.8	5878.4	5937.8	5860.9
52.5°	7221.2	7175.8	7077.8	7200.3	7658.3	7560.5	6686.2	6661.7	6574.2	6560.3	6525.3
55°	7385.5	7385.5	7403.0	7686.3	8340.3	8210.9	7399.6	7424.0	7305.1	7207.2	7252.6
57.5°	7434.6	7455.6	7605.9	8074.4	9141.1	8718.0	8186.3	8221.4	8050.0	7854.2	7997.5
60°	7193.3	7256.1	7616.4	8294.8	9592.1	9256.5	9015.2	9025.7	8777.3	8490.6	8742.5
62.5°	6574.2	6651.2	7294.6	8385.7	9518.7	9809.0	9798.5	9823.0	9483.8	9127.0	9441.7
65°	5815.4	5892.4	6577.7	8130.4	9462.7	10204.1	10515.4	10581.9	10144.6	9665.7	9878.9
67.5°	4699.9	4801.4	5451.8	7270.3	9190.0	10529.4	11186.8	11256.8	10655.2	9945.3	9840.5
70°	3406.1	3455.1	4000.5	5525.1	8078.0	10351.0	11718.3	11714.8	10823.0	9924.4	9316.0
72.5°	1640.0	1678.6	2150.6	3430.4	5777.0	8784.3	11333.6	11400.1	10592.3	9620.2	8116.5
75°	674.8	713.3	870.7	1447.8	3031.9	5804.9	9606.1	9763.5	9620.2	8634.0	6350.5
77.5°	419.7	433.6	510.5	748.4	1384.7	2710.1	6724.6	6938.0	7623.3	6916.9	4192.8
80°	314.8	325.2	381.2	524.5	874.2	1000.2	3339.5	3608.9	4619.4	3969.0	1898.8
82.5°	262.2	265.8	304.3	381.2	594.5	573.5	1070.2	1192.5	2154.1	1514.3	654.0
85°	244.8	251.7	272.7	272.7	377.6	360.2	444.1	465.1	625.9	517.6	227.4
87.5°	125.9	118.8	241.3	213.3	195.8	174.8	188.9	202.8	234.3	248.3	101.4
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°	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7	2136.7
2.5°	2129.6	2140.1	2157.5	2175.1	2196.0	2220.6	2234.5	2252.1	2266.1	2259.1	2255.6
5°	2140.1	2157.5	2196.0	2231.1	2273.0	2321.9	2353.5	2388.5	2416.4	2423.4	2412.8
7.5°	2157.5	2189.1	2241.5	2304.5	2360.4	2423.4	2472.3	2521.4	2556.2	2563.3	2563.3
10°	2199.6	2234.5	2304.5	2388.5	2454.9	2521.4	2577.2	2615.8	2647.1	2661.1	2661.1
12.5°	2259.1	2301.0	2384.9	2486.4	2559.8	2622.7	2654.2	2671.6	2685.7	2699.6	2703.2
15°	2328.9	2374.4	2475.9	2584.2	2661.1	2692.7	2692.7	2689.2	2689.2	2696.2	2703.2
17.5°	2399.0	2447.9	2552.8	2668.1	2717.2	2699.6	2675.2	2664.7	2657.6	2654.2	2664.7
20°	2472.3	2521.4	2626.3	2734.6	2720.6	2647.1	2612.2	2587.7	2566.7	2556.2	2570.3
22.5°	2552.8	2598.3	2706.7	2780.1	2675.2	2563.3	2496.7	2458.3	2423.4	2402.3	2416.4
25°	2647.1	2692.7	2797.6	2794.1	2594.8	2437.5	2332.4	2269.5	2231.1	2210.1	2210.1
27.5°	2759.1	2797.6	2899.0	2759.1	2482.8	2269.5	2115.7	2056.2	2045.7	2028.3	2028.3
30°	2874.4	2905.9	2993.4	2678.7	2328.9	2049.3	1881.4	1853.5	1856.8	1839.4	1843.0
32.5°	2993.4	3024.9	3049.3	2559.8	2129.6	1800.9	1689.1	1668.1	1664.6	1650.5	1636.6
35°	3161.2	3206.7	3056.4	2399.0	1888.3	1594.6	1514.3	1493.3	1472.2	1423.3	1423.3
37.5°	3416.6	3465.5	3038.8	2199.6	1640.0	1433.8	1360.4	1332.4	1297.4	1248.5	1230.9
40°	3766.2	3766.2	3000.3	1975.8	1440.7	1304.3	1234.5	1199.4	1161.0	1112.0	1101.5
42.5°	4178.8	4081.0	2941.0	1748.6	1293.9	1216.9	1154.1	1115.5	1070.2	1014.1	1007.1
45°	4661.5	4395.6	2857.0	1545.7	1185.5	1164.6	1126.0	1059.6	982.7	923.2	912.7
47.5°	5130.0	4678.9	2776.7	1402.3	1094.6	1143.5	1112.0	1000.2	895.3	811.3	800.7
50°	5644.1	4930.6	2682.2	1283.4	1024.5	1129.4	1094.6	912.7	797.3	737.9	731.0
52.5°	6158.2	5185.9	2580.8	1157.5	965.1	1101.5	1052.5	849.7	793.8	713.3	703.0
55°	6700.2	5483.3	2461.8	1017.6	895.3	1045.5	996.6	846.3	818.3	713.3	688.9
57.5°	7228.2	5811.9	2269.5	881.2	818.3	961.6	975.6	825.4	765.9	706.3	678.4
60°	7812.2	6161.7	1951.3	765.9	751.8	891.7	947.7	779.8	706.3	685.3	671.5
62.5°	8280.8	6476.4	1524.7	685.3	695.8	835.8	912.7	751.8	682.0	664.4	661.0
65°	8483.7	6483.3	1094.6	615.5	640.0	783.3	877.7	727.4	661.0	654.0	650.5
67.5°	8270.3	6126.7	769.3	549.0	580.5	734.4	832.3	703.0	640.0	643.5	636.4
70°	7581.4	5374.7	563.0	486.1	524.5	682.0	783.3	671.5	615.5	622.4	611.9
72.5°	6343.6	4189.3	451.0	433.6	479.1	625.9	734.4	636.4	577.0	580.5	559.6
75°	4685.9	2776.7	377.6	388.2	426.6	573.5	671.5	590.9	535.0	521.0	507.1
77.5°	2787.1	1426.8	311.3	339.2	381.2	510.5	601.4	535.0	489.5	465.1	454.6
80°	1150.5	577.0	255.3	286.7	332.3	454.6	531.5	468.6	437.1	412.6	398.7
82.5°	458.0	283.2	202.8	234.3	279.7	395.2	465.1	412.6	381.2	363.6	325.2
85°	174.8	139.9	136.5	164.4	209.8	304.3	384.7	346.1	321.8	276.3	265.8
87.5°	70.0	62.9	62.9	80.4	118.8	192.3	276.3	241.3	251.7	199.3	202.8
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)