

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: P800327

Luminaire Tested: **ARCH2-90-750-U-T3**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12463 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

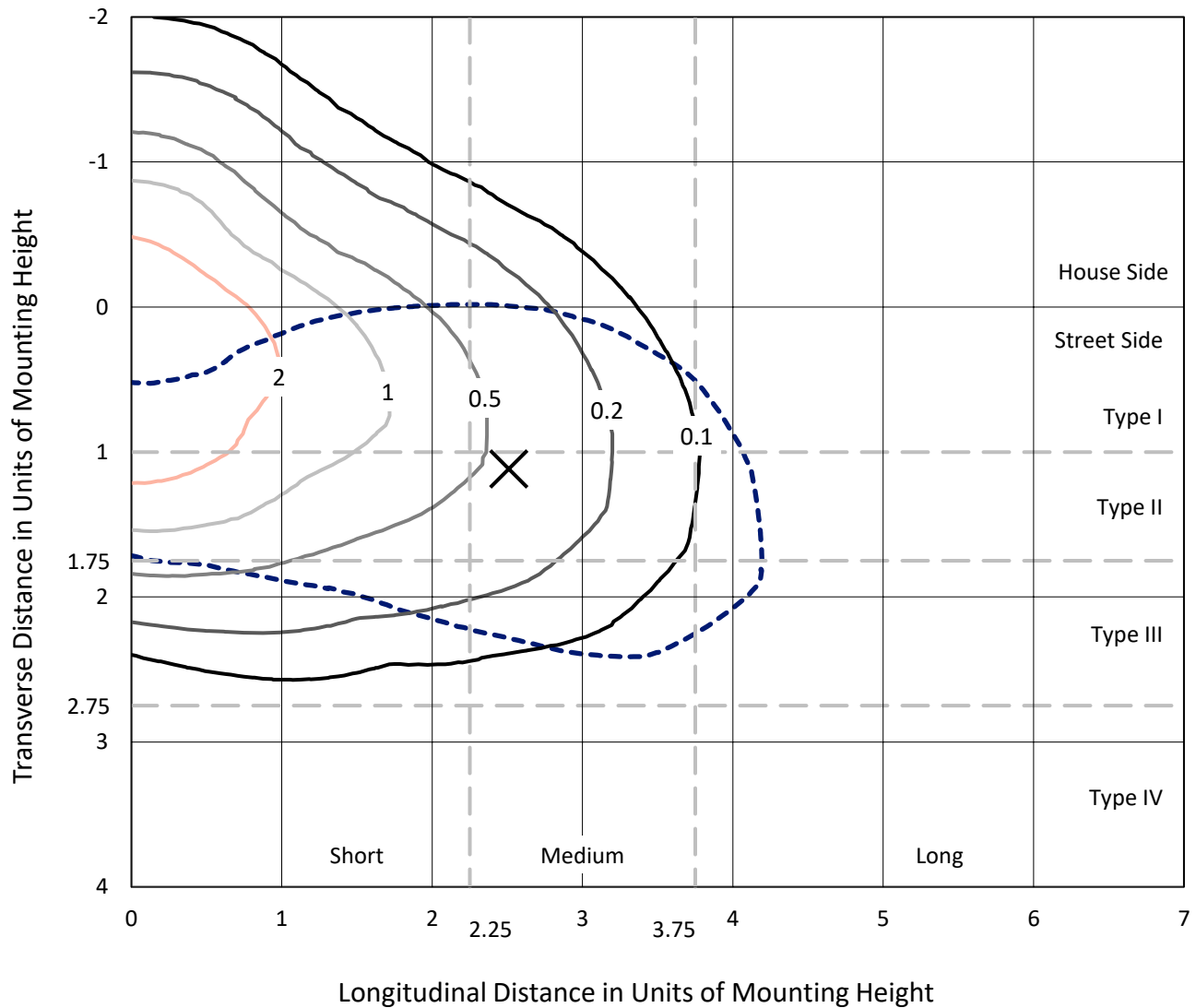
Input Watts (W): 93.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

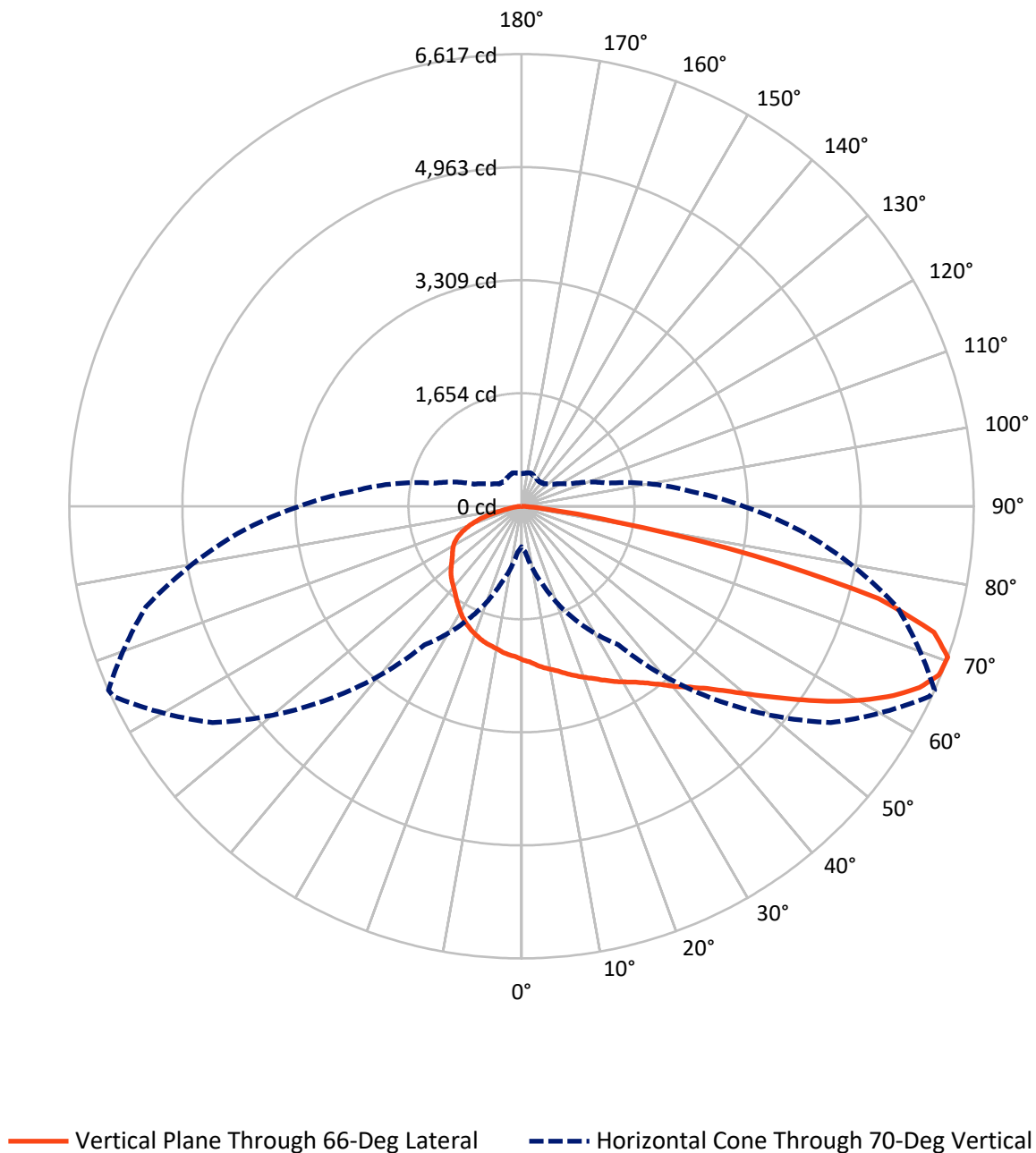
✕ Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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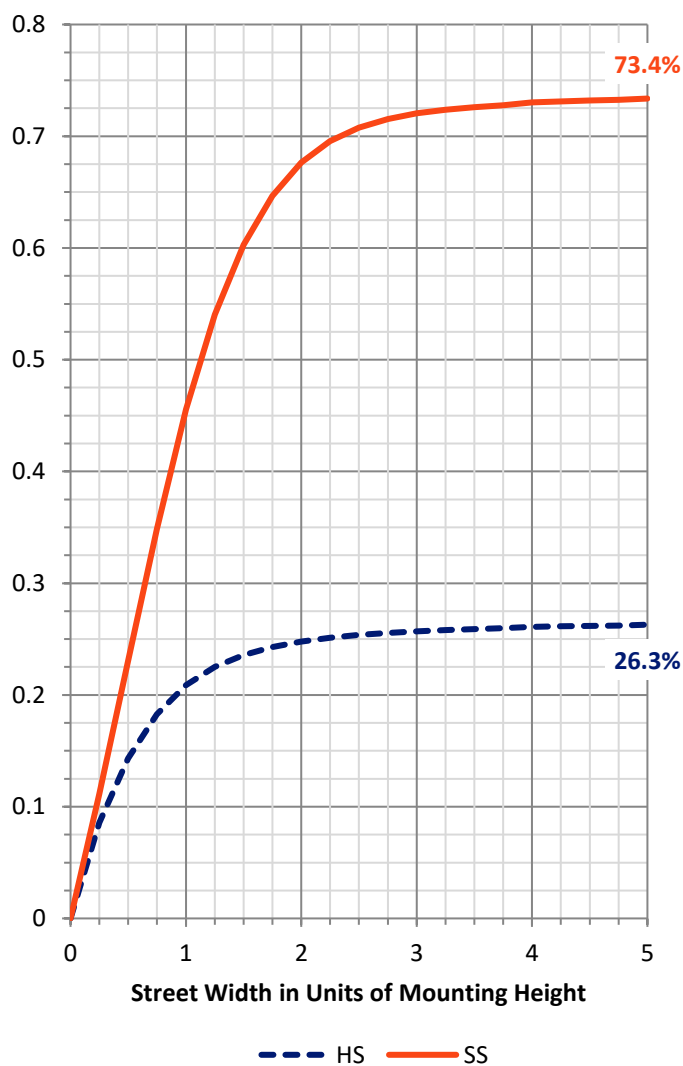
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3302.4	0.0	3302.4
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	9160.6	0.0	9160.6
	% Fixture	73.5	0.0	73.5
Total	Lumens	12463.0	0.0	12463.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.1	1.7
10°-20°	648.3	5.2
20°-30°	1086.8	8.7
30°-40°	1627.3	13.1
40°-50°	2175.7	17.5
50°-60°	2540.2	20.4
60°-70°	2525.8	20.3
70°-80°	1495.3	12.0
80°-90°	147.4	1.2
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°	12463.0	100.0
0°-180°	12463.0	100.0

Coefficient of Utilization



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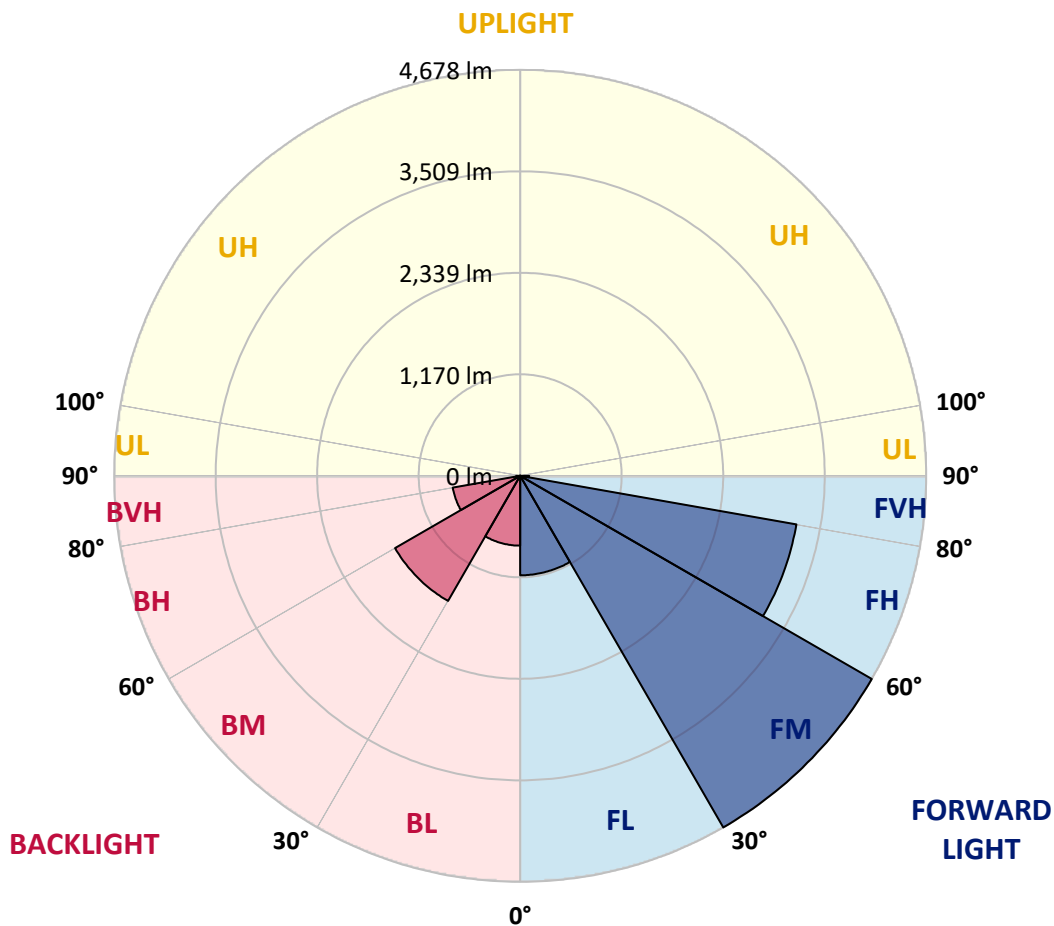
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1146.3	9.2			
FM	(30°-60°)	4678.4	37.5			
FH	(60°-80°)	3232.3	25.9			G2/5000
FVH	(80°-90°)	103.6	0.8			G2/225
BL	(0°-30°)	805.0	6.5	B2/1000		
BM	(30°-60°)	1664.8	13.4	B2/2500		
BH	(60°-80°)	788.9	6.3	B2/1000		G2/1000
BVH	(80°-90°)	43.8	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3
2.5°	2332.0	2328.3	2326.5	2319.1	2302.6	2309.9	2293.4	2282.4	2280.5	2254.8	2240.1
5°	2427.5	2425.7	2422.0	2411.0	2385.3	2388.9	2361.4	2341.2	2335.7	2295.2	2264.0
7.5°	2508.4	2504.7	2502.9	2488.2	2460.6	2458.8	2425.7	2396.3	2387.1	2332.0	2284.2
10°	2570.9	2565.4	2569.0	2554.3	2524.9	2519.4	2477.2	2438.6	2429.4	2359.5	2293.4
12.5°	2624.2	2620.5	2626.0	2613.1	2589.3	2583.7	2541.5	2491.9	2480.8	2400.0	2313.6
15°	2683.0	2670.1	2681.1	2675.6	2659.1	2657.2	2618.7	2563.5	2548.8	2451.4	2344.8
17.5°	2714.2	2706.9	2719.7	2721.6	2714.2	2727.1	2690.3	2624.2	2611.3	2499.2	2372.4
20°	2736.3	2725.2	2739.9	2751.0	2756.5	2782.2	2752.8	2688.5	2673.8	2545.1	2398.1
22.5°	2811.6	2787.7	2789.6	2796.9	2800.6	2837.3	2819.0	2756.5	2741.8	2602.1	2429.4
25°	3000.9	2953.1	2921.9	2899.8	2874.1	2905.3	2894.3	2833.7	2820.8	2670.1	2468.0
27.5°	3294.9	3234.3	3171.8	3107.5	3006.4	2993.5	2975.2	2920.0	2905.3	2738.1	2506.6
30°	3629.4	3568.7	3495.2	3392.3	3203.0	3103.8	3061.5	3000.9	2984.3	2798.7	2543.3
32.5°	3962.0	3908.7	3835.2	3710.2	3440.1	3237.9	3147.9	3085.4	3068.9	2864.9	2587.4
35°	4221.1	4188.0	4140.2	3984.0	3675.3	3396.0	3272.9	3197.5	3179.1	2969.6	2668.3
37.5°	4430.6	4406.7	4366.3	4202.7	3846.2	3554.0	3416.2	3329.8	3309.6	3083.6	2754.6
40°	4739.3	4676.8	4643.7	4406.7	3995.1	3697.4	3577.9	3487.9	3465.8	3204.9	2824.5
42.5°	5002.1	4956.2	4915.7	4588.6	4136.6	3820.5	3730.4	3647.7	3618.3	3324.3	2899.8
45°	5046.2	5064.6	5044.4	4678.7	4360.8	3941.8	3884.8	3831.5	3803.9	3486.0	3013.8
47.5°	5048.0	5048.0	4928.6	4730.1	4638.2	4077.8	4050.2	4068.6	4039.2	3691.8	3149.7
50°	4915.7	4939.6	4877.1	4743.0	4711.7	4213.7	4252.3	4351.6	4322.2	3910.5	3296.8
52.5°	4641.9	4720.9	4719.1	4722.8	4605.2	4329.5	4465.5	4691.5	4641.9	4156.8	3453.0
55°	4158.6	4316.6	4458.1	4579.4	4513.3	4399.3	4726.4	5053.5	5002.1	4432.4	3611.0
57.5°	3745.1	3846.2	4022.6	4366.3	4404.9	4460.0	4970.9	5432.1	5386.2	4737.5	3776.4
60°	3272.9	3412.5	3588.9	4077.8	4272.5	4539.0	5239.1	5801.5	5757.4	5046.2	3936.3
62.5°	2547.0	2727.1	3079.9	3634.9	4079.6	4588.6	5450.5	6126.7	6106.5	5338.4	4079.6
65°	1775.2	1935.0	2429.4	3090.9	3772.7	4566.6	5619.5	6417.1	6398.7	5577.3	4180.7
67.5°	1036.4	1222.0	1780.7	2488.2	3230.6	4414.0	5674.7	6588.0	6588.0	5722.5	4208.2
70°	591.7	678.1	1174.3	1813.8	2477.2	3993.2	5520.3	6586.1	6617.4	5689.4	4094.3
72.5°	413.5	452.1	790.2	1220.2	1679.6	3230.6	5116.0	6268.2	6310.5	5377.0	3704.7
75°	321.6	349.2	556.8	832.5	1058.5	2194.2	4232.1	5285.1	5397.2	4583.1	2995.4
77.5°	244.4	264.6	325.3	520.1	678.1	1260.6	2793.2	3465.8	3473.2	2806.1	1606.1
80°	178.3	198.5	216.8	317.9	360.2	589.9	1054.8	1448.1	1407.6	1358.0	869.2
82.5°	106.6	126.8	132.3	172.7	176.4	251.8	369.4	466.8	448.4	597.2	408.0
85°	45.9	64.3	68.0	79.0	75.3	102.9	147.0	123.1	110.3	126.8	88.2
87.5°	11.0	18.4	18.4	20.2	16.5	25.7	27.6	20.2	18.4	22.1	22.1
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°	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3	2249.3
2.5°	2236.4	2230.9	2232.7	2201.5	2192.3	2183.1	2177.6	2173.9	2170.3	2175.8	2181.3
5°	2253.0	2240.1	2225.4	2179.5	2161.1	2140.9	2126.2	2113.3	2107.8	2107.8	2113.3
7.5°	2265.8	2243.8	2212.5	2151.9	2118.8	2091.2	2067.4	2050.8	2041.6	2041.6	2047.1
10°	2267.7	2236.4	2186.8	2113.3	2069.2	2028.8	2001.2	1982.8	1970.0	1970.0	1973.6
12.5°	2278.7	2236.4	2172.1	2083.9	2028.8	1979.2	1946.1	1918.5	1913.0	1913.0	1916.7
15°	2297.1	2245.6	2162.9	2058.2	1992.0	1935.0	1898.3	1868.9	1857.9	1865.2	1867.1
17.5°	2313.6	2251.1	2146.4	2025.1	1946.1	1883.6	1843.2	1817.4	1802.7	1819.3	1819.3
20°	2324.6	2251.1	2122.5	1982.8	1896.5	1826.6	1788.0	1756.8	1745.8	1766.0	1767.8
22.5°	2341.2	2249.3	2096.8	1940.6	1843.2	1769.7	1731.1	1707.2	1701.7	1723.7	1731.1
25°	2359.5	2253.0	2069.2	1892.8	1784.4	1712.7	1683.3	1672.3	1675.9	1703.5	1712.7
27.5°	2379.8	2260.3	2041.6	1839.5	1720.0	1655.7	1639.2	1644.7	1659.4	1694.3	1705.3
30°	2398.1	2262.2	2003.0	1777.0	1646.5	1585.9	1593.2	1617.1	1639.2	1674.1	1687.0
32.5°	2422.0	2264.0	1962.6	1709.0	1567.5	1523.4	1556.5	1595.1	1617.1	1650.2	1664.9
35°	2480.8	2295.2	1931.4	1642.9	1494.0	1470.1	1525.3	1574.9	1587.7	1617.1	1630.0
37.5°	2548.8	2346.7	1914.8	1574.9	1422.3	1416.8	1486.7	1536.3	1540.0	1558.3	1571.2
40°	2591.1	2368.7	1896.5	1517.9	1358.0	1361.7	1433.4	1472.0	1464.6	1477.5	1486.7
42.5°	2633.4	2376.1	1857.9	1470.1	1297.4	1301.1	1356.2	1383.8	1387.4	1415.0	1427.9
45°	2705.0	2396.3	1815.6	1426.0	1242.3	1229.4	1262.5	1299.2	1347.0	1400.3	1415.0
47.5°	2800.6	2438.6	1771.5	1372.7	1189.0	1146.7	1159.6	1223.9	1273.5	1323.1	1332.3
50°	2898.0	2480.8	1731.1	1308.4	1135.7	1058.5	1064.0	1122.8	1163.2	1201.8	1207.3
52.5°	2993.5	2517.6	1696.2	1247.8	1075.0	953.7	975.8	1036.4	1064.0	1082.4	1087.9
55°	3089.1	2548.8	1664.9	1196.3	1005.2	871.0	891.3	948.2	975.8	985.0	988.7
57.5°	3188.3	2585.6	1641.0	1152.2	926.2	797.5	810.4	850.8	876.6	887.6	883.9
60°	3271.0	2616.8	1628.2	1106.3	847.2	729.5	725.9	762.6	799.4	810.4	806.7
62.5°	3335.3	2637.0	1607.9	1047.5	777.3	661.6	643.2	691.0	729.5	736.9	742.4
65°	3370.3	2638.9	1558.3	972.1	705.7	588.0	575.2	623.0	646.9	654.2	654.2
67.5°	3364.7	2609.5	1460.9	871.0	639.5	521.9	510.9	540.3	575.2	580.7	575.2
70°	3250.8	2488.2	1304.7	764.5	560.5	463.1	442.9	472.3	505.4	485.1	476.0
72.5°	2927.4	2173.9	1075.0	646.9	472.3	389.6	380.4	409.8	411.6	415.3	406.1
75°	2309.9	1619.0	804.9	503.5	382.2	327.1	325.3	319.8	327.1	341.8	330.8
77.5°	1212.9	808.6	435.5	308.7	277.5	262.8	249.9	248.1	270.1	279.3	268.3
80°	657.9	453.9	249.9	185.6	169.1	170.9	187.4	183.8	207.7	213.2	204.0
82.5°	286.7	215.0	123.1	112.1	112.1	110.3	115.8	128.6	154.4	154.4	123.1
85°	62.5	53.3	47.8	55.1	62.5	62.5	62.5	62.5	44.1	23.9	16.5
87.5°	20.2	20.2	20.2	22.1	23.9	23.9	20.2	14.7	9.2	1.8	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)