

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: P214858

Luminaire Tested: **ARCH-AF24-70-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214858
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-AF24-70-D-U-T4W-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7453.9 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 74
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

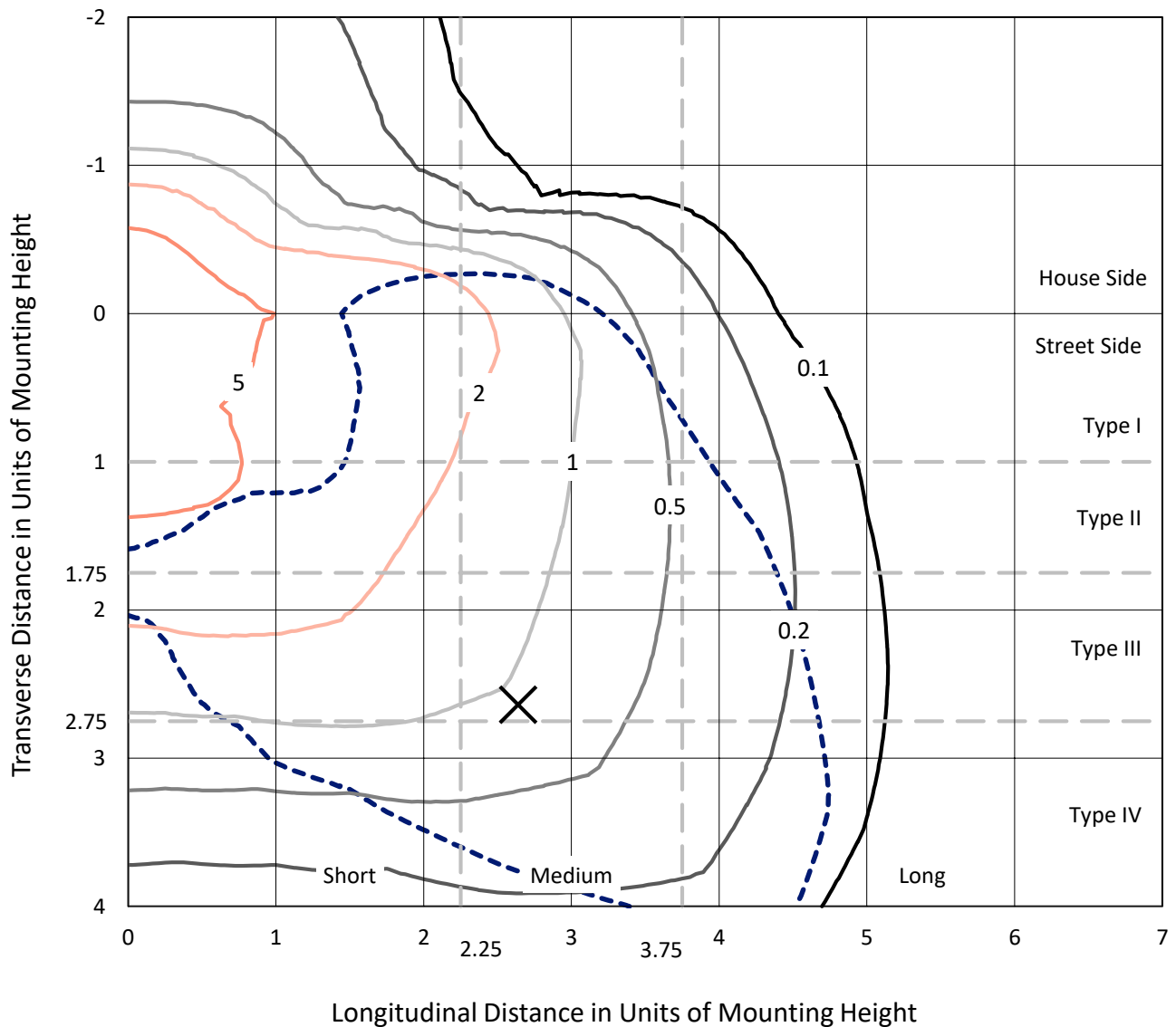


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

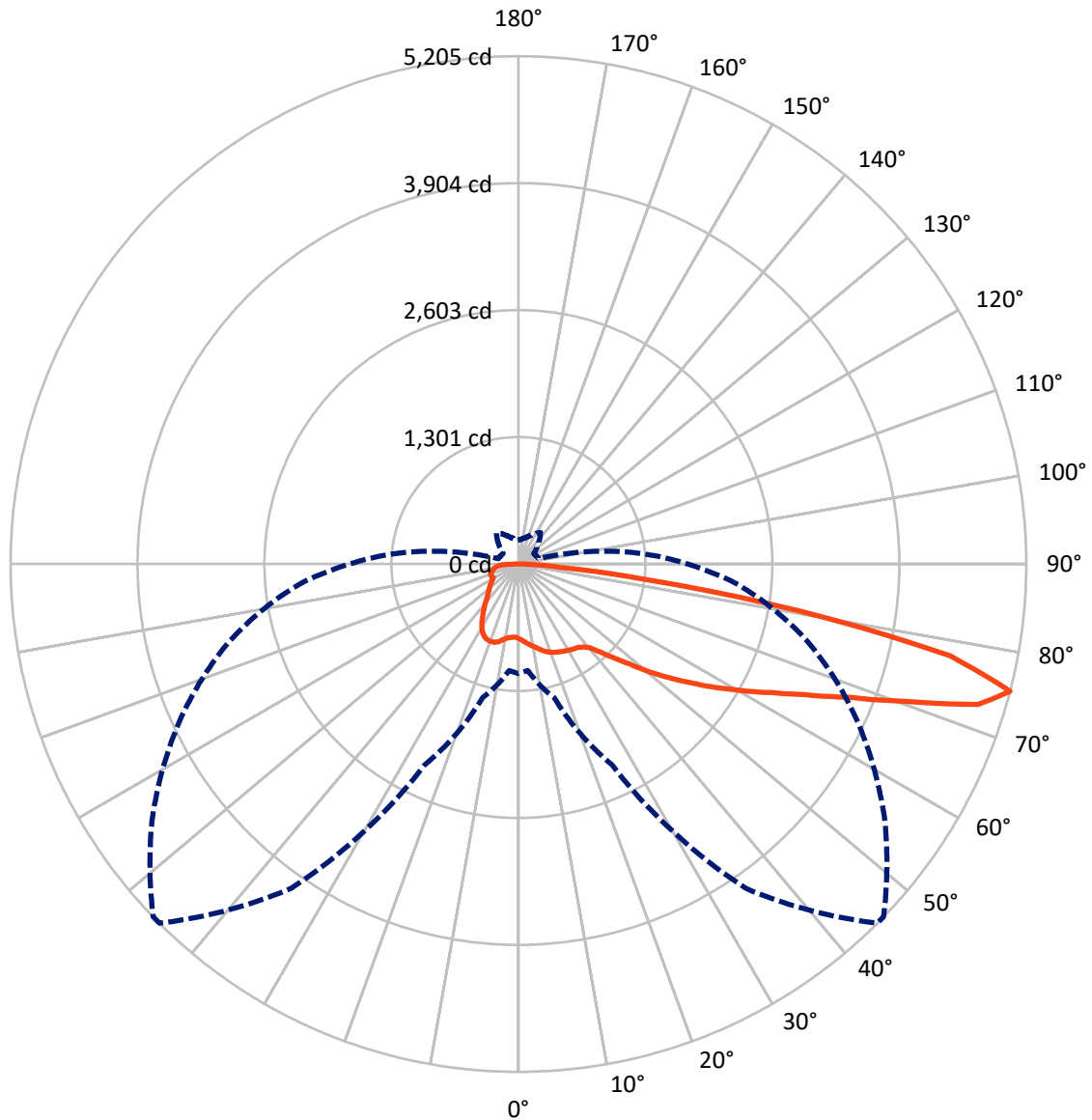


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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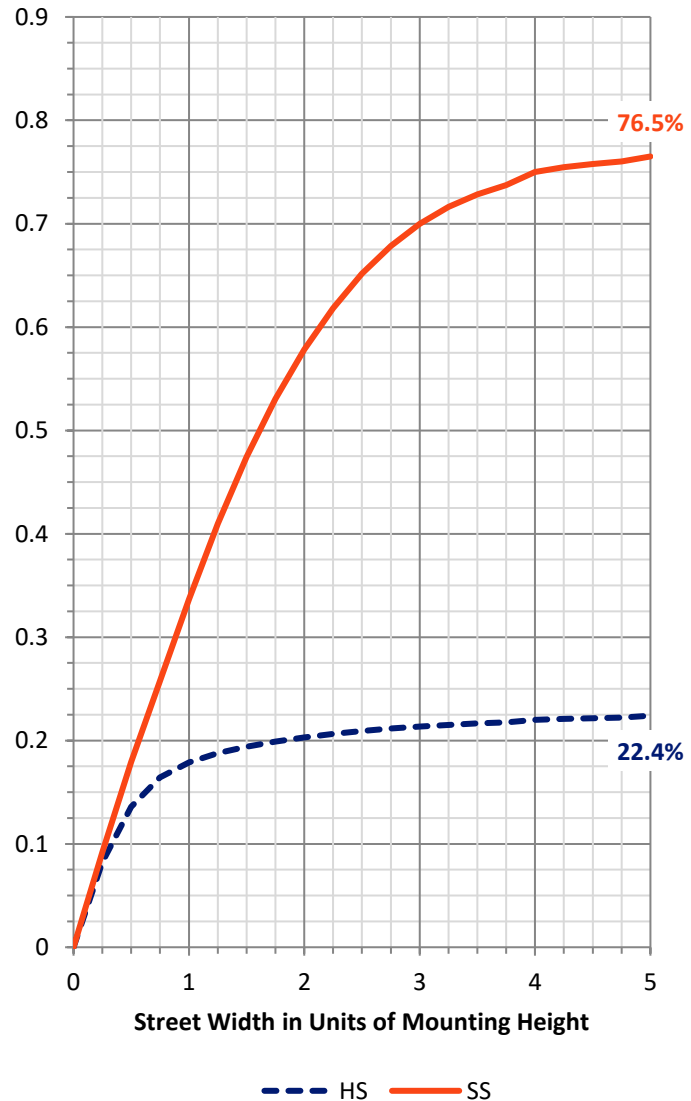
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1726.7	0.0	1726.7
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5727.2	0.0	5727.2
	% Fixture	76.8	0.0	76.8
Total	Lumens	7453.9	0.0	7453.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	1.0
10°-20°	245.4	3.3
20°-30°	421.1	5.6
30°-40°	588.9	7.9
40°-50°	863.9	11.6
50°-60°	1345.8	18.1
60°-70°	1936.5	26.0
70°-80°	1686.9	22.6
80°-90°	289.7	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°	7453.9	100.0
0°-180°	7453.9	100.0

Coefficient of Utilization



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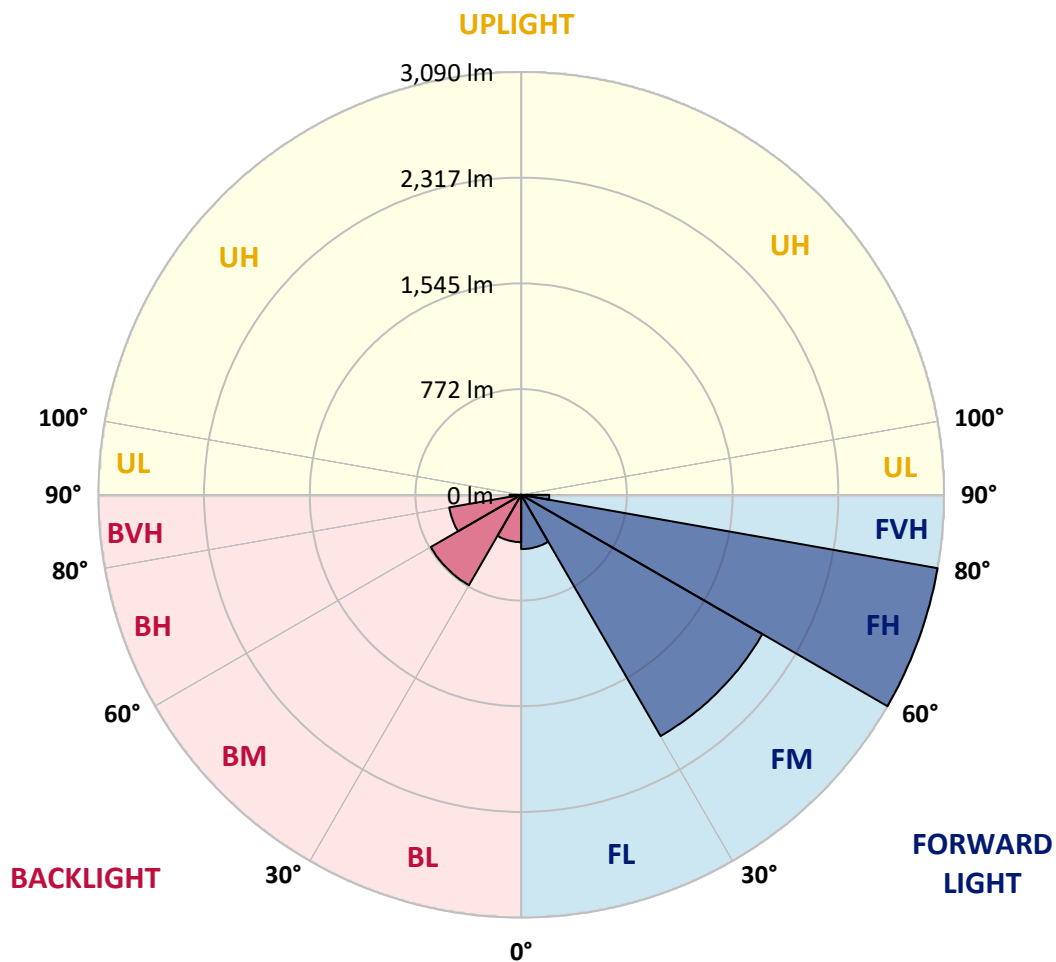
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	396.4	5.3			
FM	(30°-60°)	2035.5	27.3			
FH	(60°-80°)	3089.8	41.5			G2/5000
FVH	(80°-90°)	205.5	2.8			G2/225
BL	(0°-30°)	345.8	4.6	B1/500		
BM	(30°-60°)	763.1	10.2	B1/1000		
BH	(60°-80°)	533.6	7.2	B2/1000		G2/1000
BVH	(80°-90°)	84.1	1.1			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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1
2.5°	801.8	796.0	796.0	791.7	791.7	784.4	781.5	780.1	772.8	768.5	764.1
5°	848.2	841.0	839.5	829.4	825.0	809.1	807.6	797.5	784.4	771.4	761.2
7.5°	890.3	885.9	878.7	868.5	855.5	835.2	833.7	817.8	796.0	778.6	764.1
10°	920.7	917.8	907.7	894.6	880.1	859.8	858.4	841.0	814.9	794.6	774.3
12.5°	957.0	952.6	939.6	922.2	906.2	887.4	885.9	871.4	842.4	816.3	790.2
15°	991.8	986.0	970.0	952.6	935.2	919.3	919.3	903.3	872.9	842.4	812.0
17.5°	1009.2	1006.3	990.3	971.5	957.0	945.4	943.9	929.4	899.0	867.1	833.7
20°	1015.0	1016.4	1001.9	981.6	971.5	965.7	964.2	954.1	920.7	890.3	858.4
22.5°	1013.5	1017.9	1006.3	984.5	981.6	981.6	981.6	970.0	943.9	913.5	881.6
25°	1019.3	1025.1	1016.4	990.3	990.3	996.1	996.1	990.3	967.1	941.0	909.1
27.5°	1039.6	1044.0	1036.7	1000.5	1001.9	1010.6	1009.2	1010.6	996.1	971.5	939.6
30°	1064.3	1070.1	1061.4	1016.4	1015.0	1023.7	1023.7	1030.9	1020.8	994.7	968.6
32.5°	1131.0	1129.5	1102.0	1033.8	1029.5	1038.2	1038.2	1045.4	1039.6	1019.3	994.7
35°	1329.6	1307.9	1247.0	1090.4	1046.9	1051.2	1051.2	1064.3	1067.2	1051.2	1029.5
37.5°	1532.6	1525.4	1479.0	1241.2	1110.7	1078.8	1077.3	1096.2	1109.2	1096.2	1081.7
40°	1737.1	1731.3	1721.1	1442.7	1244.1	1128.1	1123.7	1139.7	1162.9	1154.2	1145.5
42.5°	1927.0	1924.1	1934.3	1641.4	1413.7	1233.9	1220.9	1202.0	1235.4	1232.5	1232.5
45°	2076.4	2083.6	2089.4	1827.0	1597.9	1370.2	1354.3	1290.5	1335.4	1347.0	1355.7
47.5°	2160.5	2166.3	2186.6	2008.2	1782.0	1528.3	1516.7	1412.3	1471.7	1506.5	1531.2
50°	2280.8	2264.9	2282.3	2185.1	2003.9	1734.2	1702.3	1576.1	1651.5	1712.4	1770.4
52.5°	2396.8	2370.7	2385.2	2389.6	2256.2	1935.7	1902.4	1769.0	1863.2	1958.9	2061.9
55°	2501.2	2499.8	2514.3	2588.2	2499.8	2151.8	2114.1	1982.1	2118.4	2221.4	2395.4
57.5°	2585.3	2599.8	2663.6	2818.8	2781.1	2386.7	2344.6	2230.1	2391.0	2494.0	2782.5
60°	2683.9	2707.1	2813.0	3014.5	3037.7	2633.2	2589.7	2507.0	2670.9	2775.3	3230.6
62.5°	2717.3	2750.6	2968.1	3220.4	3306.0	2902.9	2863.7	2808.6	2965.2	3059.5	3677.2
65°	2495.4	2559.2	3053.7	3326.3	3594.5	3227.7	3194.3	3146.5	3258.1	3320.5	3980.2
67.5°	2434.5	2463.5	2886.9	3478.5	3865.7	3645.3	3611.9	3529.3	3532.2	3506.1	4078.8
70°	2349.0	2380.9	2715.8	3593.1	4254.2	4216.5	4175.9	3932.4	3783.0	3625.0	3884.5
72.5°	2001.0	1990.8	2340.3	3284.2	4441.3	4924.1	4876.3	4365.9	3968.6	3522.0	3278.4
75°	1123.7	1094.7	1419.5	2272.1	4055.6	5205.4	5204.0	4584.8	3838.1	3068.2	2231.5
77.5°	326.2	317.5	468.3	952.6	2730.3	4522.5	4577.6	4135.4	3203.0	2204.0	1225.2
80°	153.7	156.6	201.5	314.6	1165.8	2918.8	3076.9	2723.1	1914.0	1016.4	506.0
82.5°	97.1	98.6	137.7	203.0	493.0	1325.3	1455.8	1225.2	758.3	439.3	223.3
85°	60.9	60.9	91.3	133.4	294.3	423.4	459.6	417.6	324.8	239.2	121.8
87.5°	33.3	33.3	55.1	76.8	160.9	136.3	140.6	166.7	203.0	146.4	60.9
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°	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1	764.1
2.5°	762.7	759.8	755.4	754.0	752.5	751.1	752.5	755.4	752.5	752.5	754.0
5°	758.3	755.4	749.6	749.6	751.1	752.5	759.8	764.1	765.6	765.6	765.6
7.5°	758.3	754.0	749.6	751.1	754.0	759.8	771.4	778.6	784.4	785.9	785.9
10°	765.6	759.8	756.9	759.8	768.5	772.8	784.4	796.0	803.3	806.2	806.2
12.5°	778.6	772.8	772.8	778.6	790.2	796.0	806.2	814.9	823.6	827.9	827.9
15°	800.4	793.1	794.6	804.7	817.8	823.6	830.8	833.7	841.0	846.8	846.8
17.5°	820.7	813.4	816.3	827.9	836.6	839.5	843.9	842.4	845.3	849.7	851.1
20°	843.9	836.6	838.1	845.3	846.8	843.9	843.9	839.5	838.1	845.3	848.2
22.5°	867.1	859.8	858.4	854.0	846.8	839.5	835.2	830.8	827.9	835.2	838.1
25°	894.6	884.5	877.2	858.4	839.5	826.5	820.7	817.8	816.3	823.6	826.5
27.5°	925.1	914.9	893.2	852.6	822.1	800.4	796.0	796.0	798.9	803.3	806.2
30°	954.1	943.9	904.8	839.5	791.7	759.8	755.4	759.8	767.0	771.4	775.7
32.5°	983.1	972.9	912.0	819.2	746.7	706.1	703.2	710.5	722.1	725.0	727.9
35°	1022.2	1012.1	920.7	790.2	690.2	646.7	643.8	648.1	658.3	662.6	667.0
37.5°	1077.3	1071.5	933.8	758.3	638.0	590.1	581.4	578.5	584.3	582.9	588.7
40°	1149.8	1154.2	957.0	716.3	587.2	537.9	519.1	510.4	504.6	493.0	498.8
42.5°	1255.7	1258.6	983.1	668.4	543.7	488.6	464.0	448.0	436.4	417.6	420.5
45°	1410.8	1386.2	1013.5	617.7	504.6	449.5	420.5	401.6	385.7	369.7	371.2
47.5°	1616.7	1541.3	1046.9	575.6	465.4	417.6	391.5	369.7	350.9	337.8	339.3
50°	1870.5	1734.2	1080.2	536.5	426.3	392.9	369.7	346.5	327.7	314.6	313.2
52.5°	2205.4	1966.2	1102.0	493.0	387.1	371.2	350.9	329.1	305.9	290.0	288.5
55°	2553.4	2235.9	1120.8	440.8	349.4	346.5	336.4	311.7	284.2	263.9	261.0
57.5°	2936.2	2524.4	1135.3	390.0	320.4	326.2	323.3	294.3	263.9	245.0	243.6
60°	3284.2	2823.1	1088.9	345.1	294.3	305.9	308.8	284.2	268.2	272.6	274.0
62.5°	3635.1	3053.7	912.0	311.7	276.9	292.9	317.5	316.1	308.8	316.1	317.5
65°	3761.3	3101.5	646.7	284.2	259.5	298.7	345.1	342.2	308.8	295.8	292.9
67.5°	3690.2	2959.4	435.0	262.4	246.5	305.9	374.1	342.2	297.2	279.8	274.0
70°	3352.4	2610.0	319.0	240.7	234.9	304.5	390.0	340.7	291.4	272.6	265.3
72.5°	2673.8	2014.0	256.6	220.4	217.5	297.2	398.7	337.8	285.6	265.3	256.6
75°	1731.3	1252.8	216.0	200.1	191.4	285.6	394.4	329.1	278.4	252.3	246.5
77.5°	803.3	539.4	184.1	176.9	166.7	268.2	381.3	311.7	262.4	237.8	230.5
80°	374.1	255.2	155.1	153.7	149.3	253.7	363.9	291.4	243.6	223.3	211.7
82.5°	200.1	153.7	126.1	126.1	130.5	236.3	342.2	266.8	218.9	208.8	178.3
85°	105.8	88.4	91.3	98.6	111.6	208.8	313.2	240.7	191.4	159.5	155.1
87.5°	53.6	56.5	56.5	66.7	85.5	169.6	258.1	198.6	162.4	130.5	127.6
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)