

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: P231272

Luminaire Tested: **ARCH-M-AF48-60-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231272
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-M-AF48-60-D-U-T4W-7030
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7683 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 63
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

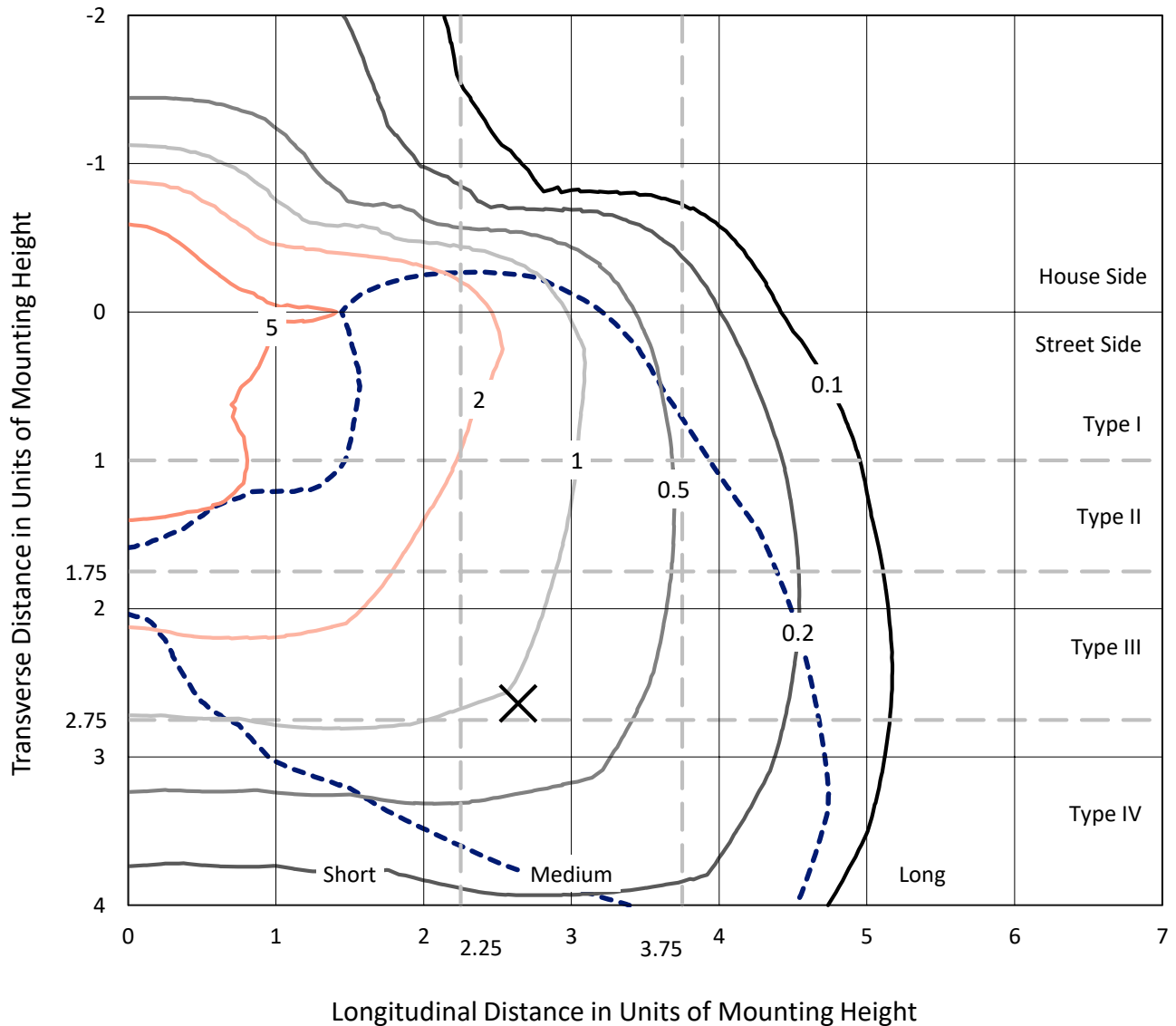


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

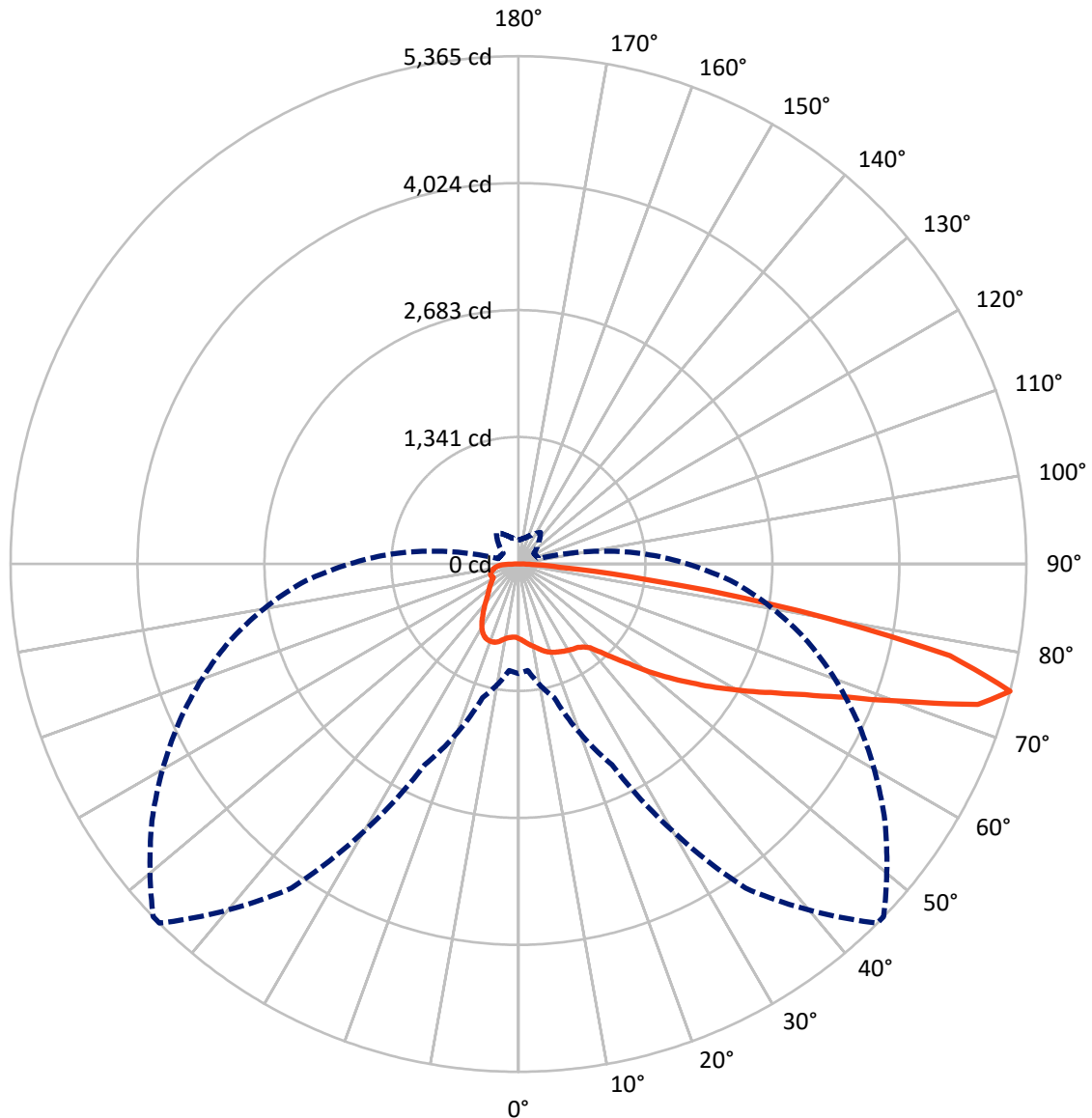


Based on 10 foot mounting height. Maximum calculated value = 9.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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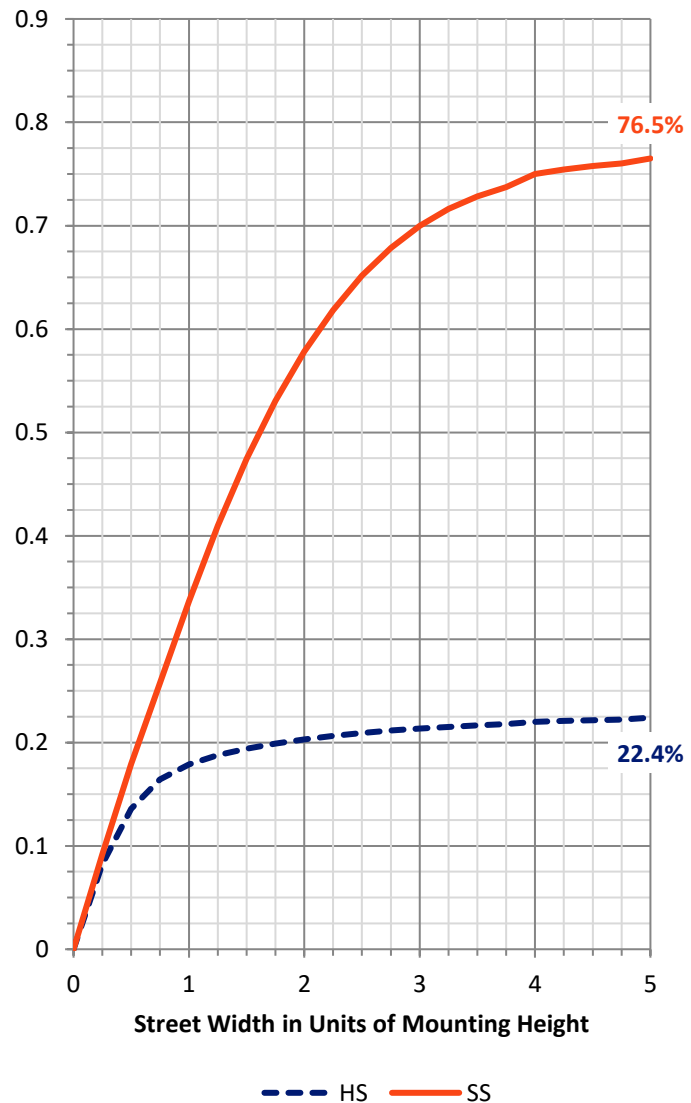
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1779.8	0.0	1779.8
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	5903.2	0.0	5903.2
	% Fixture	76.8	0.0	76.8
Total	Lumens	7683.0	0.0	7683.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	1.0
10°-20°	252.9	3.3
20°-30°	434.0	5.6
30°-40°	607.0	7.9
40°-50°	890.5	11.6
50°-60°	1387.1	18.1
60°-70°	1996.0	26.0
70°-80°	1738.7	22.6
80°-90°	298.6	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°	7683.0	100.0
0°-180°	7683.0	100.0



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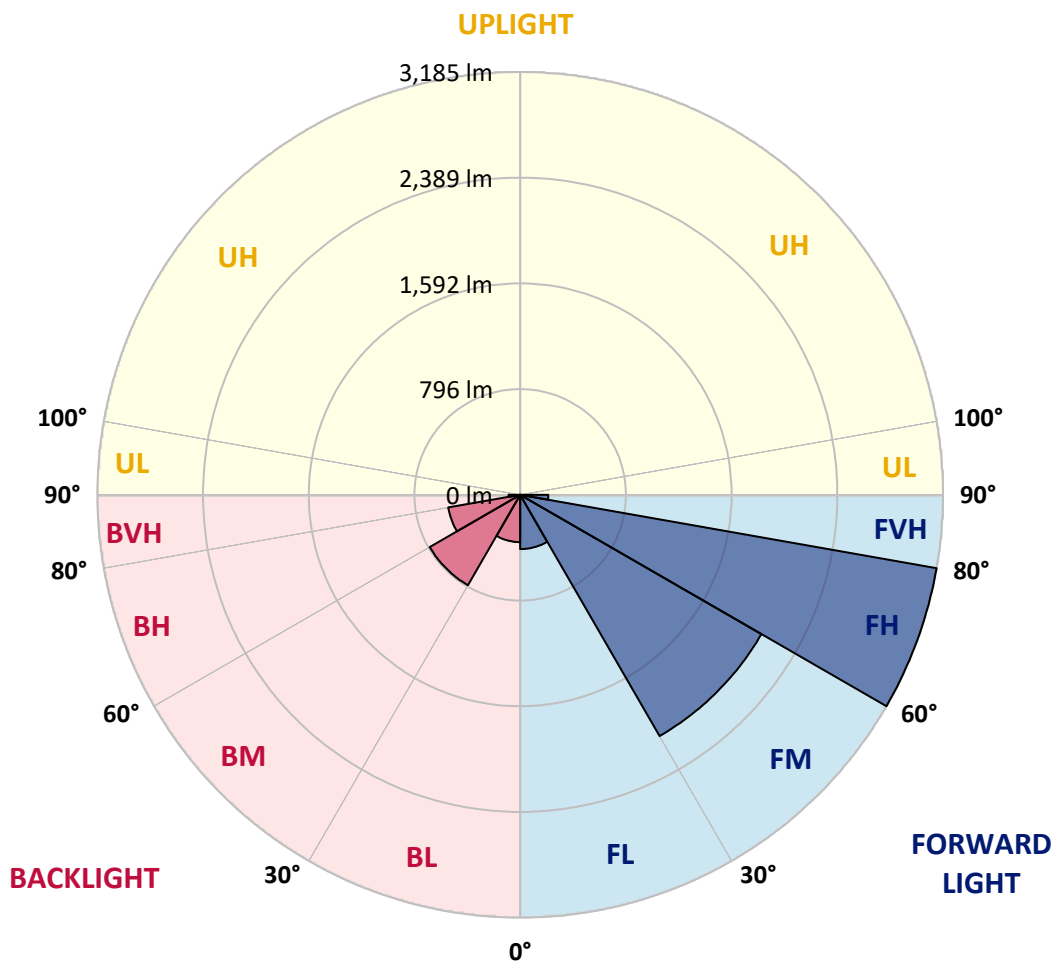
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	408.6	5.3			
FM	(30°-60°)	2098.1	27.3			
FH	(60°-80°)	3184.7	41.5			G2/5000
FVH	(80°-90°)	211.9	2.8			G2/225
BL	(0°-30°)	356.5	4.6	B1/500		
BM	(30°-60°)	786.6	10.2	B1/1000		
BH	(60°-80°)	550.0	7.2	B2/1000		G2/1000
BVH	(80°-90°)	86.7	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°	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6
2.5°	826.5	820.5	820.5	816.0	816.0	808.5	805.6	804.1	796.6	792.1	787.6
5°	874.3	866.8	865.3	854.9	850.4	833.9	832.5	822.0	808.5	795.1	784.6
7.5°	917.6	913.2	905.7	895.2	881.8	860.8	859.4	842.9	820.5	802.6	787.6
10°	949.0	946.0	935.6	922.1	907.2	886.3	884.8	866.8	839.9	819.0	798.1
12.5°	986.4	981.9	968.5	950.5	934.1	914.7	913.2	898.2	868.3	841.4	814.5
15°	1022.3	1016.3	999.8	981.9	964.0	947.5	947.5	931.1	899.7	868.3	836.9
17.5°	1040.2	1037.2	1020.8	1001.3	986.4	974.4	972.9	958.0	926.6	893.7	859.4
20°	1046.2	1047.7	1032.7	1011.8	1001.3	995.4	993.9	983.4	949.0	917.6	884.8
22.5°	1044.7	1049.2	1037.2	1014.8	1011.8	1011.8	1011.8	999.8	972.9	941.6	908.7
25°	1050.7	1056.6	1047.7	1020.8	1020.8	1026.7	1026.7	1020.8	996.9	969.9	937.1
27.5°	1071.6	1076.1	1068.6	1031.2	1032.7	1041.7	1040.2	1041.7	1026.7	1001.3	968.5
30°	1097.0	1103.0	1094.0	1047.7	1046.2	1055.1	1055.1	1062.6	1052.1	1025.2	998.3
32.5°	1165.7	1164.2	1135.8	1065.6	1061.1	1070.1	1070.1	1077.6	1071.6	1050.7	1025.2
35°	1370.5	1348.1	1285.3	1123.9	1079.0	1083.5	1083.5	1097.0	1100.0	1083.5	1061.1
37.5°	1579.7	1572.2	1524.4	1279.3	1144.8	1111.9	1110.4	1129.9	1143.3	1129.9	1114.9
40°	1790.4	1784.5	1774.0	1487.1	1282.3	1162.7	1158.3	1174.7	1198.6	1189.6	1180.7
42.5°	1986.2	1983.2	1993.7	1691.8	1457.2	1271.8	1258.4	1239.0	1273.3	1270.3	1270.3
45°	2140.2	2147.6	2153.6	1883.1	1647.0	1412.3	1395.9	1330.1	1376.5	1388.4	1397.4
47.5°	2226.8	2232.8	2253.7	2069.9	1836.8	1575.2	1563.3	1455.7	1516.9	1552.8	1578.2
50°	2350.9	2334.5	2352.4	2252.3	2065.4	1787.5	1754.6	1624.6	1702.3	1765.0	1824.8
52.5°	2470.5	2443.6	2458.5	2463.0	2325.5	1995.2	1960.8	1823.3	1920.5	2019.1	2125.2
55°	2578.1	2576.6	2591.5	2667.7	2576.6	2217.9	2179.0	2043.0	2183.5	2289.6	2469.0
57.5°	2664.7	2679.7	2745.4	2905.4	2866.5	2460.0	2416.7	2298.6	2464.5	2570.6	2868.0
60°	2766.4	2790.3	2899.4	3107.1	3131.0	2714.1	2669.2	2584.0	2752.9	2860.5	3329.8
62.5°	2800.7	2835.1	3059.3	3319.3	3407.5	2992.0	2951.7	2894.9	3056.3	3153.5	3790.1
65°	2572.1	2637.8	3147.5	3428.4	3704.9	3326.8	3292.4	3243.1	3358.2	3422.5	4102.5
67.5°	2509.3	2539.2	2975.6	3585.4	3984.4	3757.2	3722.9	3637.7	3640.7	3613.8	4204.1
70°	2421.1	2454.0	2799.3	3703.4	4384.9	4346.1	4304.2	4053.2	3899.2	3736.3	4003.8
72.5°	2062.4	2052.0	2412.2	3385.1	4577.7	5075.4	5026.1	4500.0	4090.5	3630.2	3379.1
75°	1158.3	1128.4	1463.1	2341.9	4180.2	5365.4	5363.9	4725.7	3956.0	3162.4	2300.1
77.5°	336.3	327.3	482.7	981.9	2814.2	4661.4	4718.2	4262.4	3301.4	2271.7	1262.9
80°	158.4	161.4	207.7	324.3	1201.6	3008.5	3171.4	2806.7	1972.8	1047.7	521.6
82.5°	100.1	101.6	142.0	209.2	508.1	1366.0	1500.5	1262.9	781.6	452.8	230.2
85°	62.8	62.8	94.2	137.5	303.4	436.4	473.8	430.4	334.8	246.6	125.5
87.5°	34.4	34.4	56.8	79.2	165.9	140.5	145.0	171.9	209.2	150.9	62.8
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°	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6	787.6
2.5°	786.1	783.1	778.6	777.2	775.7	774.2	775.7	778.6	775.7	775.7	777.2
5°	781.6	778.6	772.7	772.7	774.2	775.7	783.1	787.6	789.1	789.1	789.1
7.5°	781.6	777.2	772.7	774.2	777.2	783.1	795.1	802.6	808.5	810.0	810.0
10°	789.1	783.1	780.1	783.1	792.1	796.6	808.5	820.5	828.0	831.0	831.0
12.5°	802.6	796.6	796.6	802.6	814.5	820.5	831.0	839.9	848.9	853.4	853.4
15°	825.0	817.5	819.0	829.5	842.9	848.9	856.4	859.4	866.8	872.8	872.8
17.5°	845.9	838.4	841.4	853.4	862.3	865.3	869.8	868.3	871.3	875.8	877.3
20°	869.8	862.3	863.8	871.3	872.8	869.8	869.8	865.3	863.8	871.3	874.3
22.5°	893.7	886.3	884.8	880.3	872.8	865.3	860.8	856.4	853.4	860.8	863.8
25°	922.1	911.7	904.2	884.8	865.3	851.9	845.9	842.9	841.4	848.9	851.9
27.5°	953.5	943.0	920.6	878.8	847.4	825.0	820.5	820.5	823.5	828.0	831.0
30°	983.4	972.9	932.6	865.3	816.0	783.1	778.6	783.1	790.6	795.1	799.6
32.5°	1013.3	1002.8	940.1	844.4	769.7	727.8	724.8	732.3	744.3	747.3	750.3
35°	1053.6	1043.2	949.0	814.5	711.4	666.6	663.6	668.1	678.5	683.0	687.5
37.5°	1110.4	1104.5	962.5	781.6	657.6	608.3	599.3	596.3	602.3	600.8	606.8
40°	1185.2	1189.6	986.4	738.3	605.3	554.5	535.0	526.1	520.1	508.1	514.1
42.5°	1294.3	1297.3	1013.3	689.0	560.4	503.7	478.2	461.8	449.9	430.4	433.4
45°	1454.2	1428.8	1044.7	636.7	520.1	463.3	433.4	414.0	397.5	381.1	382.6
47.5°	1666.4	1588.7	1079.0	593.3	479.7	430.4	403.5	381.1	361.7	348.2	349.7
50°	1927.9	1787.5	1113.4	553.0	439.4	405.0	381.1	357.2	337.8	324.3	322.8
52.5°	2273.2	2026.6	1135.8	508.1	399.0	382.6	361.7	339.3	315.3	298.9	297.4
55°	2631.9	2304.6	1155.3	454.3	360.2	357.2	346.7	321.3	292.9	272.0	269.0
57.5°	3026.4	2602.0	1170.2	402.0	330.3	336.3	333.3	303.4	272.0	252.6	251.1
60°	3385.1	2909.8	1122.4	355.7	303.4	315.3	318.3	292.9	276.5	281.0	282.5
62.5°	3746.8	3147.5	940.1	321.3	285.5	301.9	327.3	325.8	318.3	325.8	327.3
65°	3876.8	3196.8	666.6	292.9	267.5	307.9	355.7	352.7	318.3	304.9	301.9
67.5°	3803.6	3050.3	448.4	270.5	254.1	315.3	385.6	352.7	306.4	288.4	282.5
70°	3455.3	2690.2	328.8	248.1	242.1	313.9	402.0	351.2	300.4	281.0	273.5
72.5°	2755.9	2075.9	264.5	227.2	224.2	306.4	411.0	348.2	294.4	273.5	264.5
75°	1784.5	1291.3	222.7	206.2	197.3	294.4	406.5	339.3	286.9	260.0	254.1
77.5°	828.0	556.0	189.8	182.3	171.9	276.5	393.1	321.3	270.5	245.1	237.6
80°	385.6	263.0	159.9	158.4	153.9	261.5	375.1	300.4	251.1	230.2	218.2
82.5°	206.2	158.4	130.0	130.0	134.5	243.6	352.7	275.0	225.7	215.2	183.8
85°	109.1	91.2	94.2	101.6	115.1	215.2	322.8	248.1	197.3	164.4	159.9
87.5°	55.3	58.3	58.3	68.7	88.2	174.9	266.0	204.8	167.4	134.5	131.5
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)