

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: P398086

Luminaire Tested: **ARCH-S-PA1-80-827-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398086
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-80-827-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8044 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 83
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

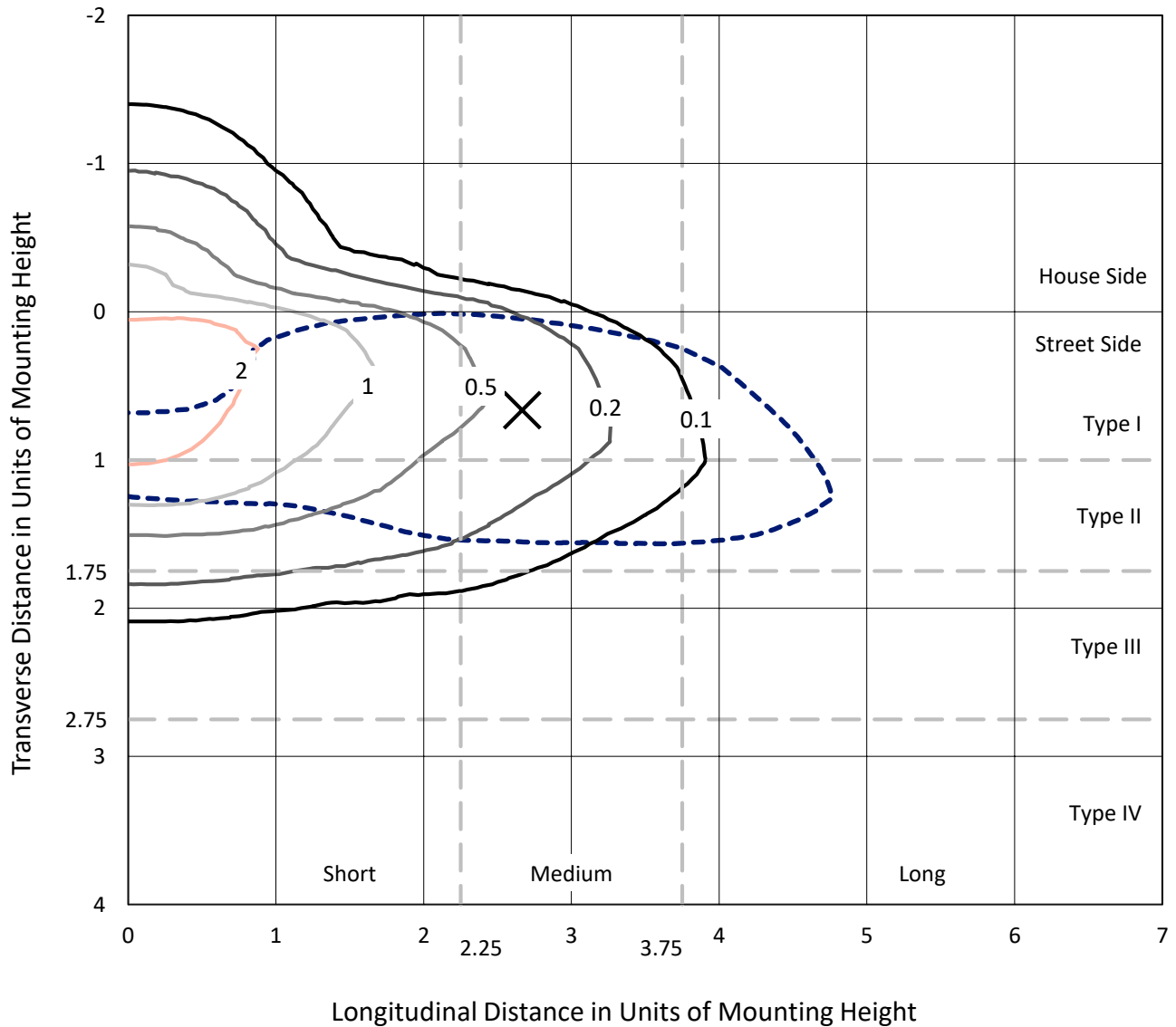


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

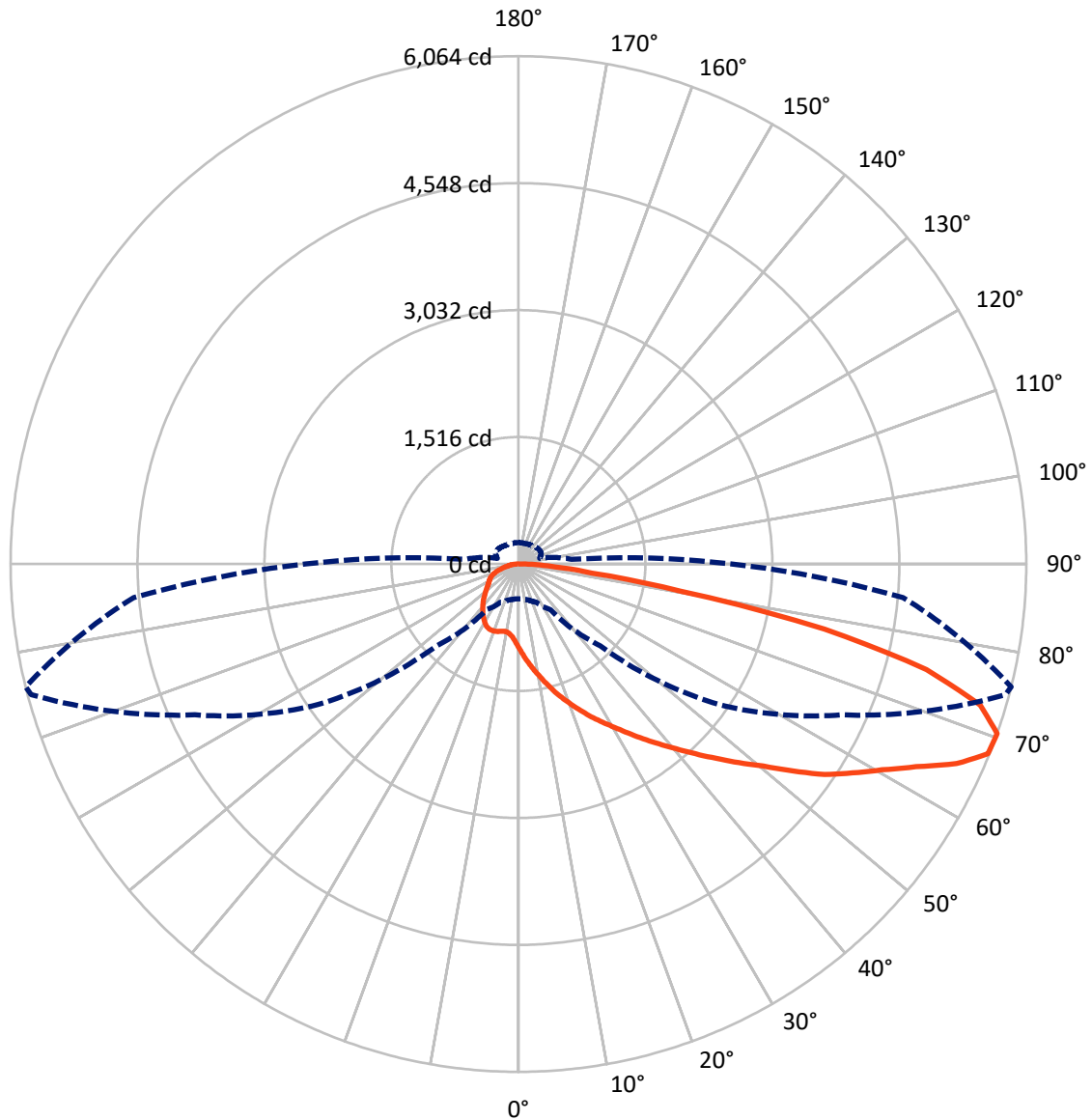


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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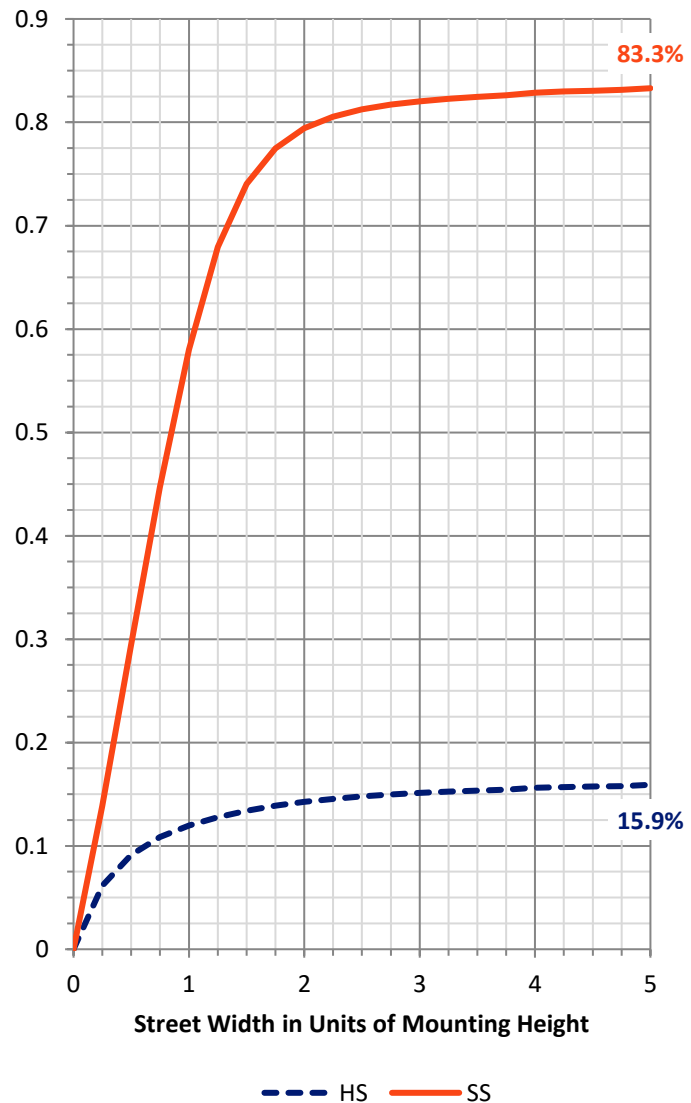
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1313.3	0.0	1313.3
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	6730.7	0.0	6730.7
	% Fixture	83.7	0.0	83.7
Total	Lumens	8044.0	0.0	8044.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.5	1.3
10°-20°	355.2	4.4
20°-30°	635.6	7.9
30°-40°	1028.1	12.8
40°-50°	1487.3	18.5
50°-60°	1702.3	21.2
60°-70°	1565.9	19.5
70°-80°	968.4	12.0
80°-90°	196.6	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°	8044.0	100.0
0°-180°	8044.0	100.0

Coefficient of Utilization



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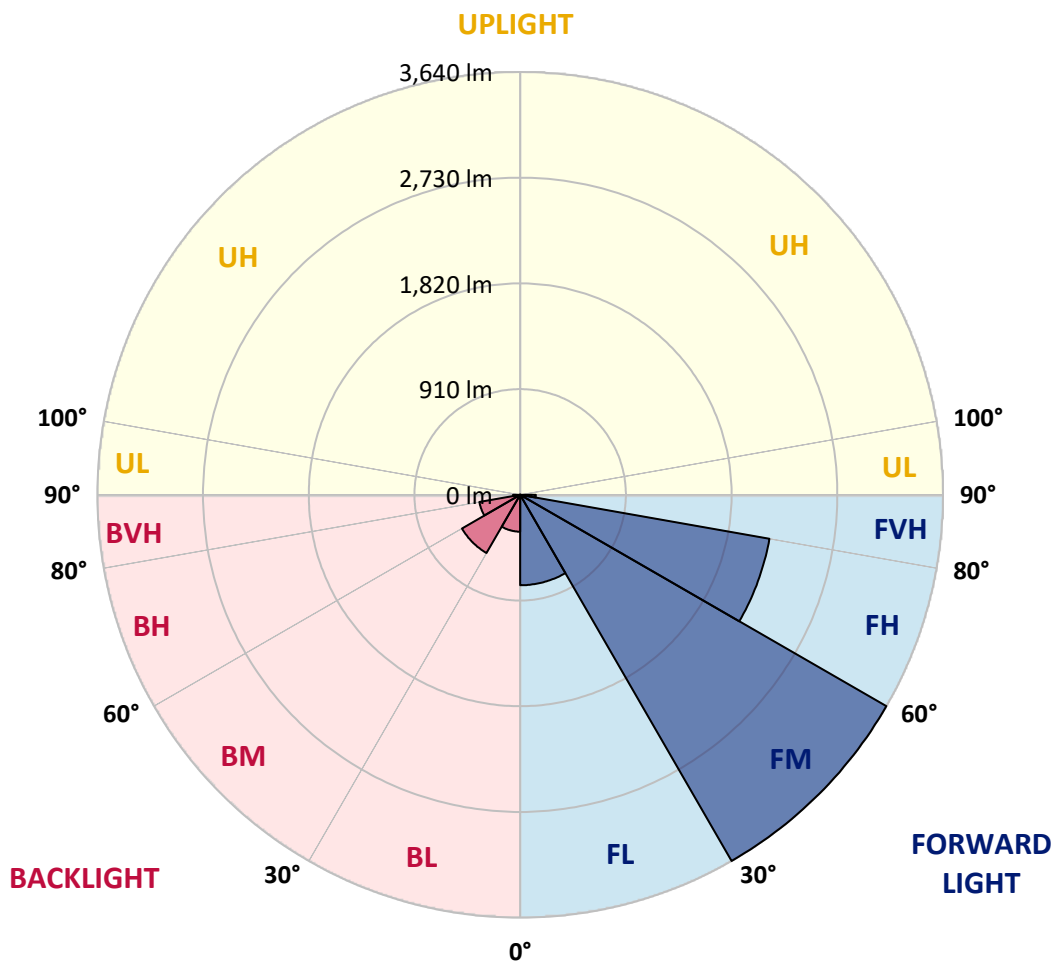
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	778.1	9.7			
FM	(30°-60°)	3639.5	45.2			
FH	(60°-80°)	2178.1	27.1			G2/5000
FVH	(80°-90°)	135.0	1.7			G2/225
BL	(0°-30°)	317.2	3.9	B1/500		
BM	(30°-60°)	578.2	7.2	B1/1000		
BH	(60°-80°)	356.2	4.4	B1/500		G1/500
BVH	(80°-90°)	61.6	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9
2.5°	1282.0	1272.5	1271.4	1256.6	1242.9	1205.9	1179.4	1132.9	1086.3	1085.3	1038.7
5°	1481.9	1472.4	1467.1	1449.1	1425.9	1377.2	1329.6	1257.7	1178.4	1173.1	1085.3
7.5°	1617.3	1608.9	1598.3	1590.9	1568.7	1525.3	1467.1	1381.4	1272.5	1261.9	1139.2
10°	1708.3	1703.0	1700.9	1695.6	1681.8	1646.9	1590.9	1499.9	1366.6	1355.0	1196.3
12.5°	1747.4	1745.3	1754.8	1769.6	1774.9	1761.2	1707.2	1621.6	1470.3	1457.6	1265.1
15°	1701.9	1704.1	1728.4	1779.2	1833.1	1862.7	1831.0	1747.4	1587.7	1569.7	1345.5
17.5°	1680.8	1684.0	1700.9	1749.5	1825.7	1917.7	1932.5	1867.0	1700.9	1675.5	1430.1
20°	1717.8	1722.0	1734.7	1772.8	1825.7	1924.1	2001.3	1981.2	1812.0	1785.5	1511.5
22.5°	1812.0	1817.2	1816.2	1840.5	1876.5	1944.2	2039.4	2089.1	1928.3	1898.7	1596.2
25°	2012.9	2008.7	1972.7	1961.1	1970.6	2014.0	2090.1	2192.8	2050.0	2020.3	1685.0
27.5°	2285.8	2280.5	2215.0	2155.7	2102.8	2121.9	2162.1	2276.3	2173.7	2139.9	1769.6
30°	2577.8	2571.4	2495.3	2399.0	2281.6	2254.1	2248.8	2349.3	2298.5	2262.6	1859.6
32.5°	2862.3	2857.0	2775.6	2663.5	2501.6	2419.1	2368.3	2430.7	2440.3	2405.4	1957.9
35°	3121.5	3121.5	3051.7	2918.4	2735.4	2610.6	2527.0	2531.2	2603.2	2563.0	2070.1
37.5°	3352.1	3351.0	3274.8	3143.7	2968.1	2825.3	2721.6	2652.9	2758.7	2723.8	2187.5
40°	3535.1	3527.7	3471.6	3357.4	3180.7	3039.0	2934.2	2795.7	2932.1	2900.4	2312.3
42.5°	3668.3	3664.1	3626.0	3526.6	3358.4	3225.1	3153.2	2975.5	3128.9	3097.1	2458.3
45°	3720.2	3728.6	3728.6	3634.5	3501.2	3379.6	3347.8	3173.3	3341.5	3309.8	2614.8
47.5°	3636.6	3658.8	3704.3	3710.6	3593.2	3510.7	3521.3	3372.2	3560.4	3543.5	2786.2
50°	3375.3	3416.6	3516.0	3695.8	3630.3	3611.2	3669.4	3575.3	3795.3	3790.0	2994.5
52.5°	2701.5	2802.0	3112.0	3434.6	3604.9	3657.8	3816.4	3803.7	4097.8	4106.3	3266.4
55°	2072.2	2110.2	2468.8	3017.8	3449.4	3643.0	3914.8	4026.9	4425.7	4436.3	3516.0
57.5°	1675.5	1700.9	1896.6	2468.8	3095.0	3562.6	3992.0	4157.0	4677.4	4704.9	3738.1
60°	1327.5	1364.5	1495.7	1889.2	2598.9	3369.0	4046.0	4301.9	4948.2	4989.5	4003.6
62.5°	986.9	1004.9	1128.6	1399.4	2057.4	3021.0	4017.4	4459.5	5280.4	5330.1	4323.1
65°	702.4	718.2	806.0	995.4	1521.1	2550.3	3851.3	4577.0	5697.1	5747.9	4644.7
67.5°	525.7	532.1	581.8	696.0	1025.0	1981.2	3515.0	4556.9	6001.8	6047.3	4773.7
70°	415.7	417.8	442.1	503.5	666.4	1379.3	2925.8	4261.7	6024.0	6064.2	4610.8
72.5°	344.8	343.8	357.5	387.1	464.4	872.7	2167.4	3713.8	5738.4	5765.9	4156.0
75°	284.5	286.7	296.2	313.1	354.4	575.4	1404.7	2962.8	5062.5	5032.9	3487.5
77.5°	239.1	238.0	242.2	257.0	286.7	413.6	822.9	2140.9	3751.9	3737.1	2289.0
80°	192.5	194.6	201.0	213.7	241.2	315.2	486.6	1336.0	2012.9	1959.0	1093.7
82.5°	129.0	149.1	161.8	176.6	208.4	232.7	308.9	679.1	900.2	886.4	496.1
85°	61.4	81.4	120.6	137.5	169.2	146.0	209.4	323.7	450.6	445.3	178.8
87.5°	12.7	12.7	64.5	77.2	104.7	62.4	116.4	140.7	217.9	204.1	73.0
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°	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9	1005.9
2.5°	1011.2	982.7	925.5	880.1	833.5	807.1	774.3	758.4	755.2	746.8	753.1
5°	1029.2	973.1	865.3	794.4	746.8	723.5	711.9	707.6	706.6	704.5	704.5
7.5°	1053.5	967.9	827.2	755.2	724.6	717.2	720.3	726.7	727.7	729.9	728.8
10°	1083.2	968.9	806.0	745.7	730.9	732.0	742.6	751.0	755.2	758.4	757.4
12.5°	1124.4	981.6	802.8	752.1	745.7	750.0	760.5	769.0	773.2	774.3	774.3
15°	1178.4	1008.1	810.2	765.8	760.5	763.7	770.1	773.2	774.3	773.2	773.2
17.5°	1237.6	1039.8	820.8	774.3	765.8	762.7	760.5	757.4	751.0	746.8	746.8
20°	1294.7	1068.3	826.1	773.2	758.4	745.7	733.0	717.2	706.6	698.1	698.1
22.5°	1351.8	1094.8	826.1	761.6	738.3	714.0	687.5	662.2	646.3	635.7	635.7
25°	1412.1	1120.2	819.8	741.5	706.6	671.7	635.7	604.0	588.1	577.5	575.4
27.5°	1462.9	1135.0	802.8	712.9	667.5	623.0	581.8	549.0	537.3	527.8	527.8
30°	1516.8	1144.5	771.1	675.9	623.0	572.3	529.9	503.5	490.8	477.1	476.0
32.5°	1577.1	1150.9	735.1	636.8	577.5	523.6	487.6	466.5	439.0	424.2	422.0
35°	1646.9	1159.3	697.1	592.3	532.1	483.4	462.2	427.3	400.9	388.2	387.1
37.5°	1721.0	1165.7	655.8	553.2	490.8	457.0	435.8	394.5	371.3	352.2	350.1
40°	1799.3	1165.7	613.5	515.1	458.0	445.3	405.1	368.1	329.0	319.4	317.3
42.5°	1886.0	1163.5	571.2	478.1	427.3	418.9	387.1	348.0	327.9	319.4	317.3
45°	1978.0	1156.1	531.0	435.8	395.6	378.7	354.4	343.8	335.3	335.3	335.3
47.5°	2082.7	1149.8	485.5	397.7	372.3	353.3	335.3	329.0	327.9	331.1	334.3
50°	2217.1	1147.7	447.4	370.2	354.4	332.1	330.0	324.7	325.8	325.8	325.8
52.5°	2380.0	1128.6	411.5	350.1	336.4	309.9	316.3	321.6	323.7	322.6	321.6
55°	2499.5	1094.8	380.8	336.4	323.7	301.5	309.9	318.4	320.5	317.3	317.3
57.5°	2607.4	1047.2	356.5	325.8	315.2	296.2	305.7	314.2	312.0	311.0	309.9
60°	2731.2	1001.7	337.4	320.5	306.8	294.1	302.5	307.8	304.6	302.5	301.5
62.5°	2865.5	957.3	323.7	320.5	300.4	293.0	299.3	301.5	295.1	293.0	293.0
65°	2927.9	887.5	308.9	320.5	297.2	290.9	293.0	290.9	284.5	284.5	283.5
67.5°	2825.3	772.2	289.8	316.3	301.5	287.7	283.5	280.3	272.9	272.9	270.8
70°	2541.8	634.7	262.3	302.5	302.5	286.7	270.8	263.4	254.9	258.1	253.9
72.5°	2171.6	503.5	228.5	279.3	296.2	285.6	257.0	245.4	238.0	241.2	234.8
75°	1759.1	390.3	188.3	242.2	280.3	280.3	243.3	227.4	219.0	219.0	211.6
77.5°	1121.2	288.8	153.4	201.0	251.7	272.9	231.7	207.3	194.6	191.5	186.2
80°	555.3	203.1	125.9	159.7	214.7	256.0	223.2	184.1	166.1	159.7	150.2
82.5°	295.1	140.7	100.5	124.8	171.4	230.6	212.6	158.7	136.5	126.9	116.4
85°	132.2	86.7	80.4	95.2	130.1	189.3	191.5	130.1	104.7	124.8	92.0
87.5°	48.7	39.1	39.1	48.7	75.1	79.3	135.4	83.6	66.6	45.5	36.0
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)