

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: P398158

Luminaire Tested: **ARCH-S-PA1-90-827-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398158
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-PA1-90-827-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8622 lumens
Efficiency: N/A
Efficacy: 91.7 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

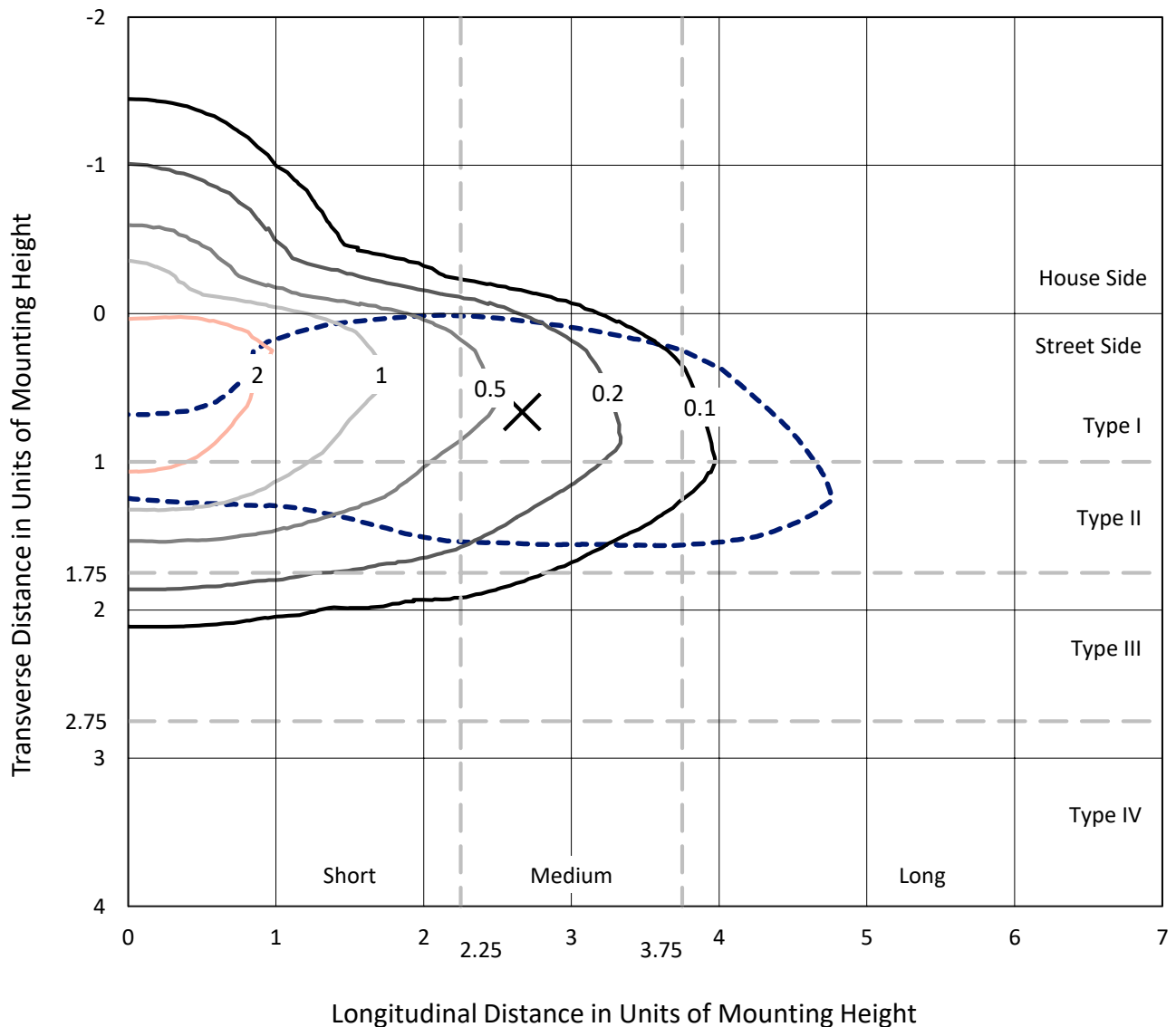
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

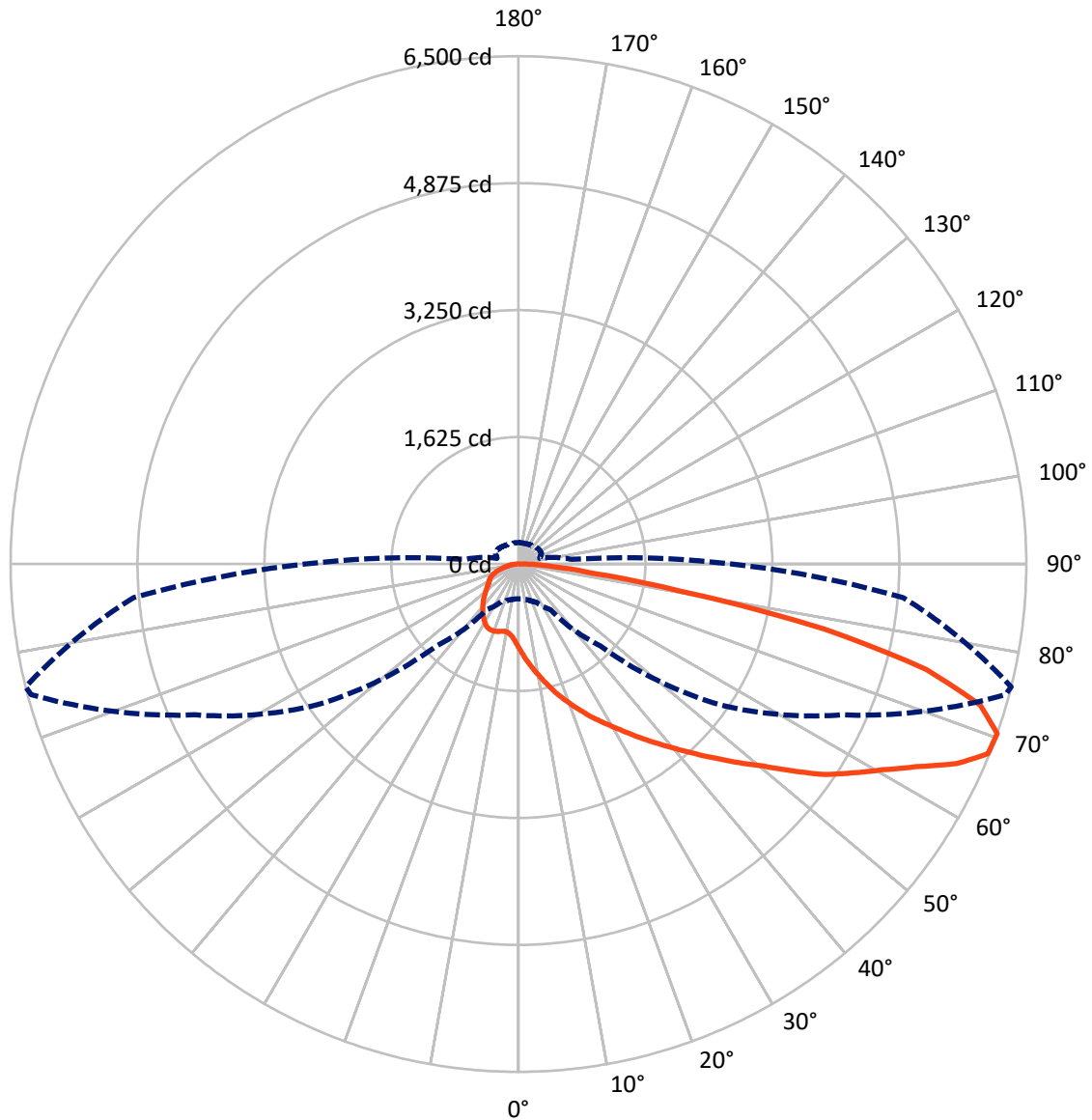


Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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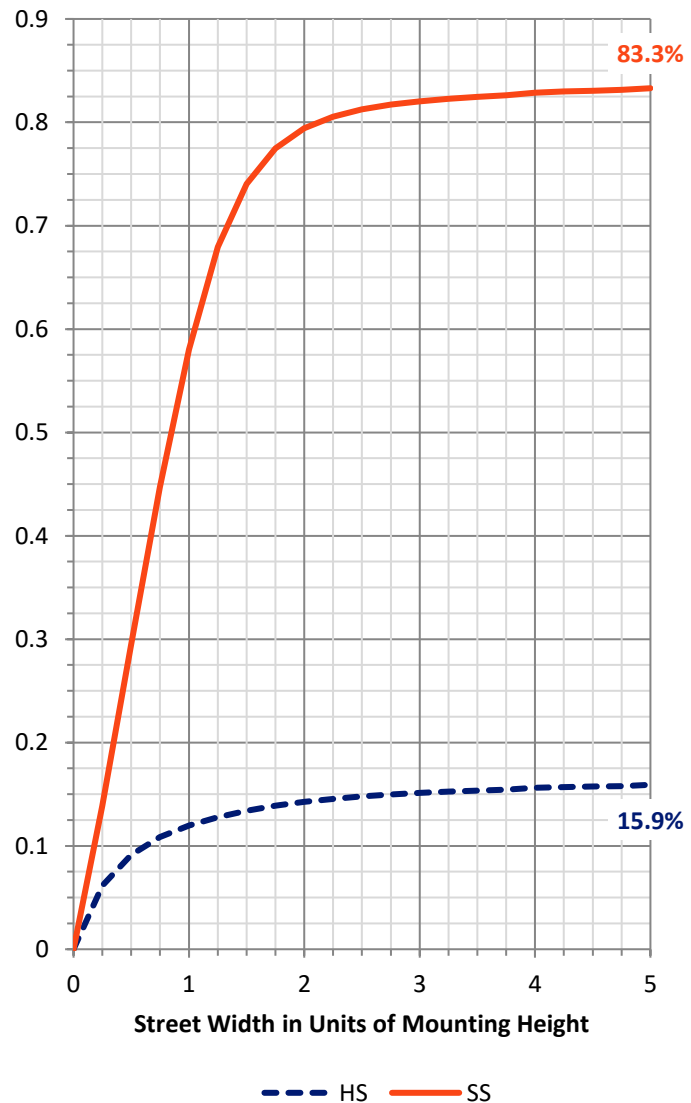
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1407.6	0.0	1407.6
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	7214.4	0.0	7214.4
	% Fixture	83.7	0.0	83.7
Total	Lumens	8622.0	0.0	8622.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.0	1.3
10°-20°	380.8	4.4
20°-30°	681.2	7.9
30°-40°	1102.0	12.8
40°-50°	1594.2	18.5
50°-60°	1824.6	21.2
60°-70°	1678.5	19.5
70°-80°	1037.9	12.0
80°-90°	210.8	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°	8622.0	100.0
0°-180°	8622.0	100.0

Coefficient of Utilization



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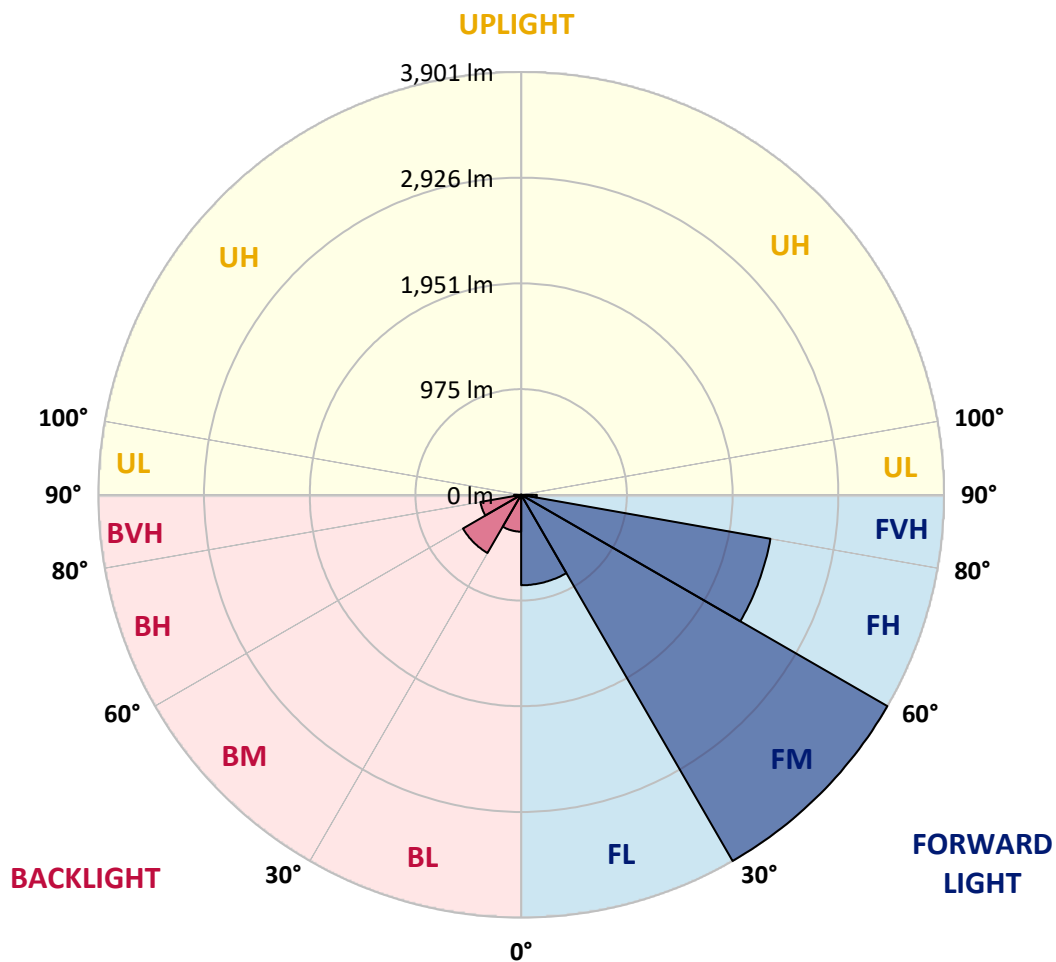
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	834.0	9.7			
FM (30°-60°)	3901.0	45.2			
FH (60°-80°)	2334.6	27.1			G2/5000
FVH (80°-90°)	144.7	1.7			G2/225
BL (0°-30°)	340.0	3.9	B1/500		
BM (30°-60°)	619.8	7.2	B1/1000		
BH (60°-80°)	381.8	4.4	B1/500		G1/500
BVH (80°-90°)	66.1	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°	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1374.1	1363.9	1362.8	1346.9	1332.2	1292.5	1264.2	1214.3	1164.4	1163.3	1113.4
5°	1588.4	1578.2	1572.5	1553.3	1528.3	1476.2	1425.2	1348.1	1263.0	1257.4	1163.3
7.5°	1733.5	1724.5	1713.1	1705.2	1681.4	1634.9	1572.5	1480.7	1363.9	1352.6	1221.1
10°	1831.0	1825.4	1823.1	1817.4	1802.7	1765.3	1705.2	1607.7	1464.8	1452.4	1282.3
12.5°	1873.0	1870.7	1880.9	1896.8	1902.5	1887.7	1829.9	1738.1	1575.9	1562.3	1356.0
15°	1824.2	1826.5	1852.6	1907.0	1964.8	1996.6	1962.6	1873.0	1701.8	1682.5	1442.2
17.5°	1801.6	1805.0	1823.1	1875.3	1956.9	2055.5	2071.4	2001.1	1823.1	1795.9	1532.9
20°	1841.2	1845.8	1859.4	1900.2	1956.9	2062.3	2145.1	2123.6	1942.2	1913.8	1620.2
22.5°	1942.2	1947.8	1946.7	1972.8	2011.3	2083.9	2185.9	2239.2	2066.9	2035.1	1710.9
25°	2157.6	2153.0	2114.5	2102.0	2112.2	2158.7	2240.3	2350.3	2197.3	2165.5	1806.1
27.5°	2450.1	2444.4	2374.1	2310.6	2253.9	2274.3	2317.4	2439.9	2329.9	2293.6	1896.8
30°	2763.0	2756.2	2674.6	2571.4	2445.5	2416.1	2410.4	2518.1	2463.7	2425.1	1993.2
32.5°	3068.0	3062.3	2975.0	2854.8	2681.4	2592.9	2538.5	2605.4	2615.6	2578.2	2098.6
35°	3345.8	3345.8	3270.9	3128.1	2931.9	2798.2	2708.6	2713.1	2790.2	2747.1	2218.8
37.5°	3592.9	3591.8	3510.2	3369.6	3181.4	3028.3	2917.2	2843.5	2956.9	2919.5	2344.6
40°	3789.1	3781.1	3721.0	3598.6	3409.3	3257.3	3145.1	2996.6	3142.8	3108.8	2478.4
42.5°	3931.9	3927.4	3886.6	3780.0	3599.7	3456.9	3379.8	3189.3	3353.7	3319.7	2634.9
45°	3987.5	3996.5	3996.5	3895.6	3752.8	3622.4	3588.4	3401.3	3581.6	3547.6	2802.7
47.5°	3897.9	3921.7	3970.5	3977.3	3851.4	3763.0	3774.3	3614.5	3816.3	3798.1	2986.4
50°	3617.9	3662.1	3768.7	3961.4	3891.1	3870.7	3933.1	3832.2	4068.0	4062.3	3209.7
52.5°	2895.7	3003.4	3335.6	3681.4	3863.9	3920.6	4090.7	4077.0	4392.2	4401.3	3501.1
55°	2221.1	2261.9	2646.2	3234.7	3697.2	3904.7	4196.1	4316.3	4743.7	4755.0	3768.7
57.5°	1795.9	1823.1	2032.9	2646.2	3317.4	3818.5	4278.9	4455.7	5013.5	5043.0	4006.8
60°	1422.9	1462.6	1603.2	2024.9	2785.7	3611.1	4336.7	4611.1	5303.8	5348.0	4291.3
62.5°	1057.8	1077.1	1209.7	1500.0	2205.2	3238.1	4306.1	4780.0	5659.8	5713.1	4633.7
65°	752.8	769.8	863.9	1066.9	1630.4	2733.5	4128.1	4905.8	6106.5	6160.9	4978.4
67.5°	563.5	570.3	623.6	746.0	1098.6	2123.6	3767.5	4884.3	6433.0	6481.8	5116.7
70°	445.6	447.8	473.9	539.7	714.3	1478.4	3136.0	4568.0	6456.8	6499.9	4942.1
72.5°	369.6	368.5	383.2	415.0	497.7	935.4	2323.1	3980.7	6150.7	6180.2	4454.6
75°	305.0	307.3	317.5	335.6	379.8	616.8	1505.7	3175.7	5426.2	5394.5	3738.0
77.5°	256.2	255.1	259.6	275.5	307.3	443.3	882.1	2294.8	4021.5	4005.6	2453.5
80°	206.3	208.6	215.4	229.0	258.5	337.9	521.5	1432.0	2157.6	2099.7	1172.3
82.5°	138.3	159.9	173.5	189.3	223.4	249.4	331.1	727.9	964.8	950.1	531.7
85°	65.8	87.3	129.3	147.4	181.4	156.5	224.5	346.9	483.0	477.3	191.6
87.5°	13.6	13.6	69.2	82.8	112.2	66.9	124.7	150.8	233.6	218.8	78.2
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°	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2	1078.2
2.5°	1083.9	1053.3	992.1	943.3	893.4	865.1	829.9	812.9	809.5	800.4	807.2
5°	1103.2	1043.1	927.4	851.5	800.4	775.5	763.0	758.5	757.4	755.1	755.1
7.5°	1129.2	1037.4	886.6	809.5	776.6	768.7	772.1	778.9	780.0	782.3	781.2
10°	1161.0	1038.5	863.9	799.3	783.4	784.6	795.9	805.0	809.5	812.9	811.8
12.5°	1205.2	1052.1	860.5	806.1	799.3	803.8	815.2	824.3	828.8	829.9	829.9
15°	1263.0	1080.5	868.5	820.9	815.2	818.6	825.4	828.8	829.9	828.8	828.8
17.5°	1326.5	1114.5	879.8	829.9	820.9	817.5	815.2	811.8	805.0	800.4	800.4
20°	1387.7	1145.1	885.5	828.8	812.9	799.3	785.7	768.7	757.4	748.3	748.3
22.5°	1449.0	1173.5	885.5	816.3	791.4	765.3	737.0	709.7	692.7	681.4	681.4
25°	1513.6	1200.7	878.7	794.8	757.4	719.9	681.4	647.4	630.4	619.0	616.8
27.5°	1568.0	1216.5	860.5	764.2	715.4	667.8	623.6	588.4	576.0	565.8	565.8
30°	1625.8	1226.7	826.5	724.5	667.8	613.4	568.0	539.7	526.1	511.3	510.2
32.5°	1690.5	1233.5	788.0	682.5	619.0	561.2	522.7	500.0	470.5	454.6	452.4
35°	1765.3	1242.6	747.2	634.9	570.3	518.1	495.5	458.0	429.7	416.1	415.0
37.5°	1844.6	1249.4	702.9	593.0	526.1	489.8	467.1	422.9	398.0	377.5	375.3
40°	1928.5	1249.4	657.6	552.1	490.9	477.3	434.2	394.6	352.6	342.4	340.1
42.5°	2021.5	1247.2	612.2	512.5	458.0	449.0	415.0	373.0	351.5	342.4	340.1
45°	2120.2	1239.2	569.2	467.1	424.0	405.9	379.8	368.5	359.4	359.4	359.4
47.5°	2232.4	1232.4	520.4	426.3	399.1	378.7	359.4	352.6	351.5	354.9	358.3
50°	2376.4	1230.1	479.6	396.8	379.8	356.0	353.7	348.1	349.2	349.2	349.2
52.5°	2551.0	1209.7	441.0	375.3	360.5	332.2	339.0	344.7	346.9	345.8	344.7
55°	2679.1	1173.5	408.2	360.5	346.9	323.1	332.2	341.3	343.5	340.1	340.1
57.5°	2794.8	1122.4	382.1	349.2	337.9	317.5	327.7	336.7	334.5	333.3	332.2
60°	2927.4	1073.7	361.7	343.5	328.8	315.2	324.3	329.9	326.5	324.3	323.1
62.5°	3071.4	1026.1	346.9	343.5	322.0	314.1	320.9	323.1	316.3	314.1	314.1
65°	3138.3	951.2	331.1	343.5	318.6	311.8	314.1	311.8	305.0	305.0	303.9
67.5°	3028.3	827.7	310.7	339.0	323.1	308.4	303.9	300.4	292.5	292.5	290.2
70°	2724.5	680.3	281.2	324.3	324.3	307.3	290.2	282.3	273.2	276.6	272.1
72.5°	2327.6	539.7	244.9	299.3	317.5	306.1	275.5	263.0	255.1	258.5	251.7
75°	1885.5	418.4	201.8	259.6	300.4	300.4	260.8	243.8	234.7	234.7	226.8
77.5°	1201.8	309.5	164.4	215.4	269.8	292.5	248.3	222.2	208.6	205.2	199.5
80°	595.2	217.7	134.9	171.2	230.2	274.4	239.2	197.3	178.0	171.2	161.0
82.5°	316.3	150.8	107.7	133.8	183.7	247.2	227.9	170.1	146.3	136.1	124.7
85°	141.7	93.0	86.2	102.0	139.5	202.9	205.2	139.5	112.2	133.8	98.6
87.5°	52.2	41.9	41.9	52.2	80.5	85.0	145.1	89.6	71.4	48.8	38.5
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)