

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: P397852

Luminaire Tested: **ARCH-S-PA1-50-750-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397852
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-PA1-50-750-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7911 lumens
Efficiency: N/A
Efficacy: 146.5 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

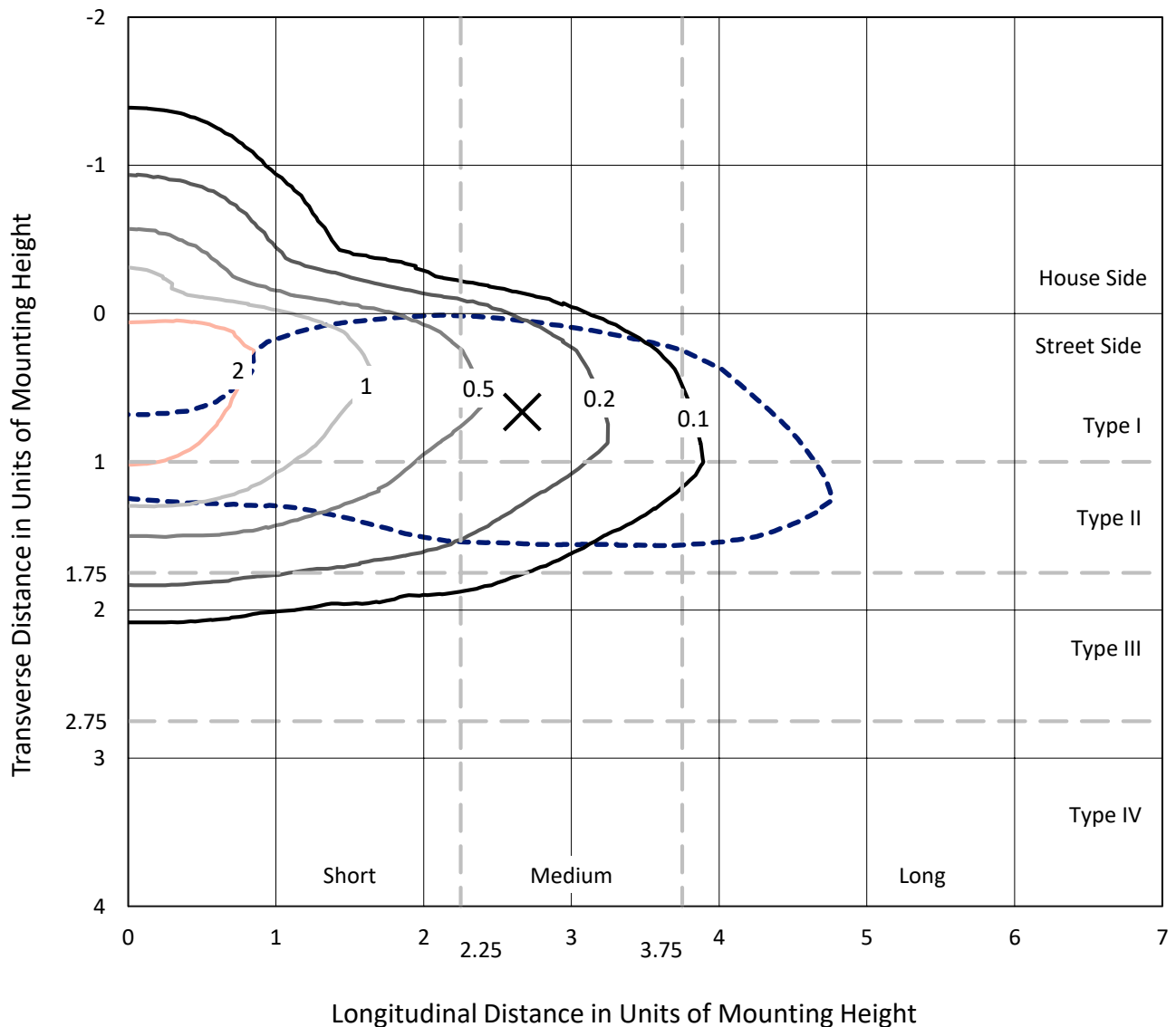
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

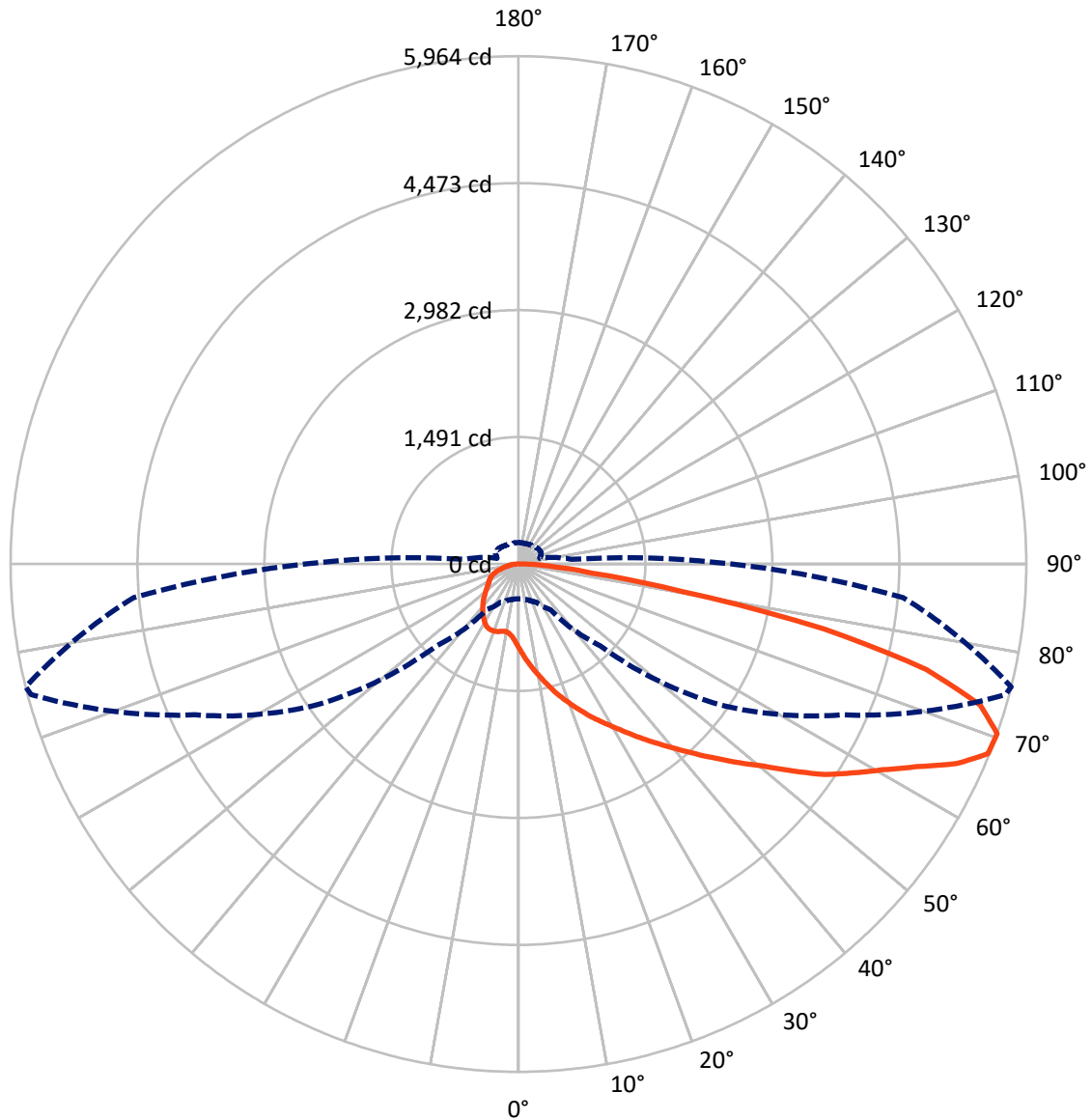


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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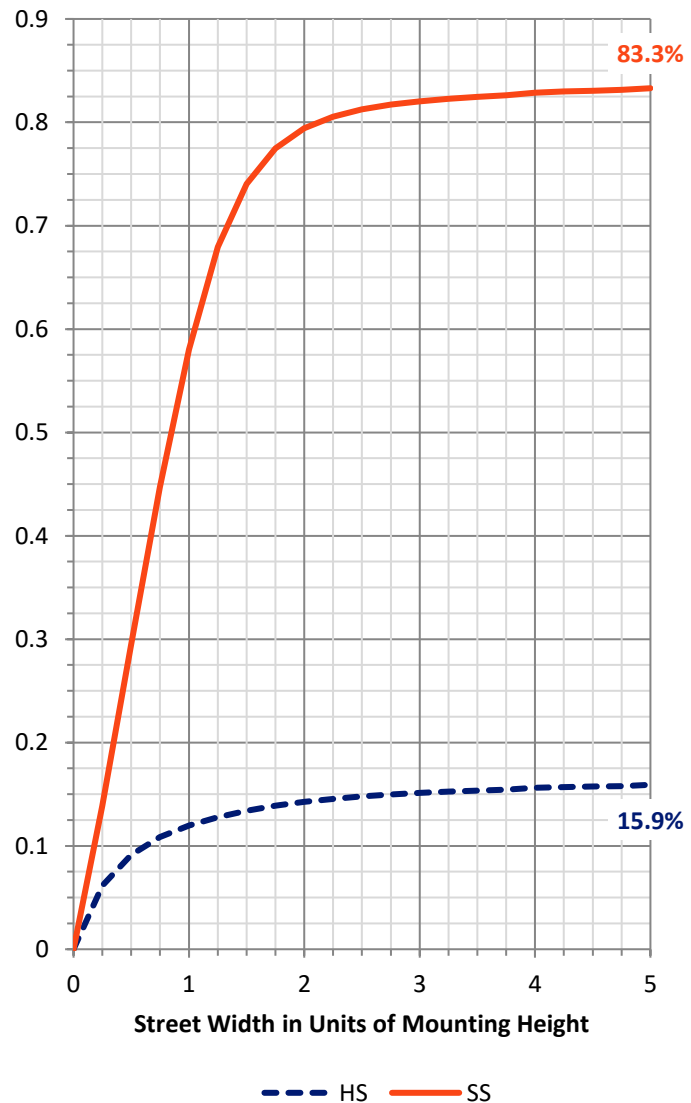
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1291.6	0.0	1291.6
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	6619.5	0.0	6619.5
	% Fixture	83.7	0.0	83.7
Total	Lumens	7911.0	0.0	7911.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	1.3
10°-20°	349.4	4.4
20°-30°	625.1	7.9
30°-40°	1011.1	12.8
40°-50°	1462.7	18.5
50°-60°	1674.2	21.2
60°-70°	1540.1	19.5
70°-80°	952.3	12.0
80°-90°	193.4	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°	7911.0	100.0
0°-180°	7911.0	100.0



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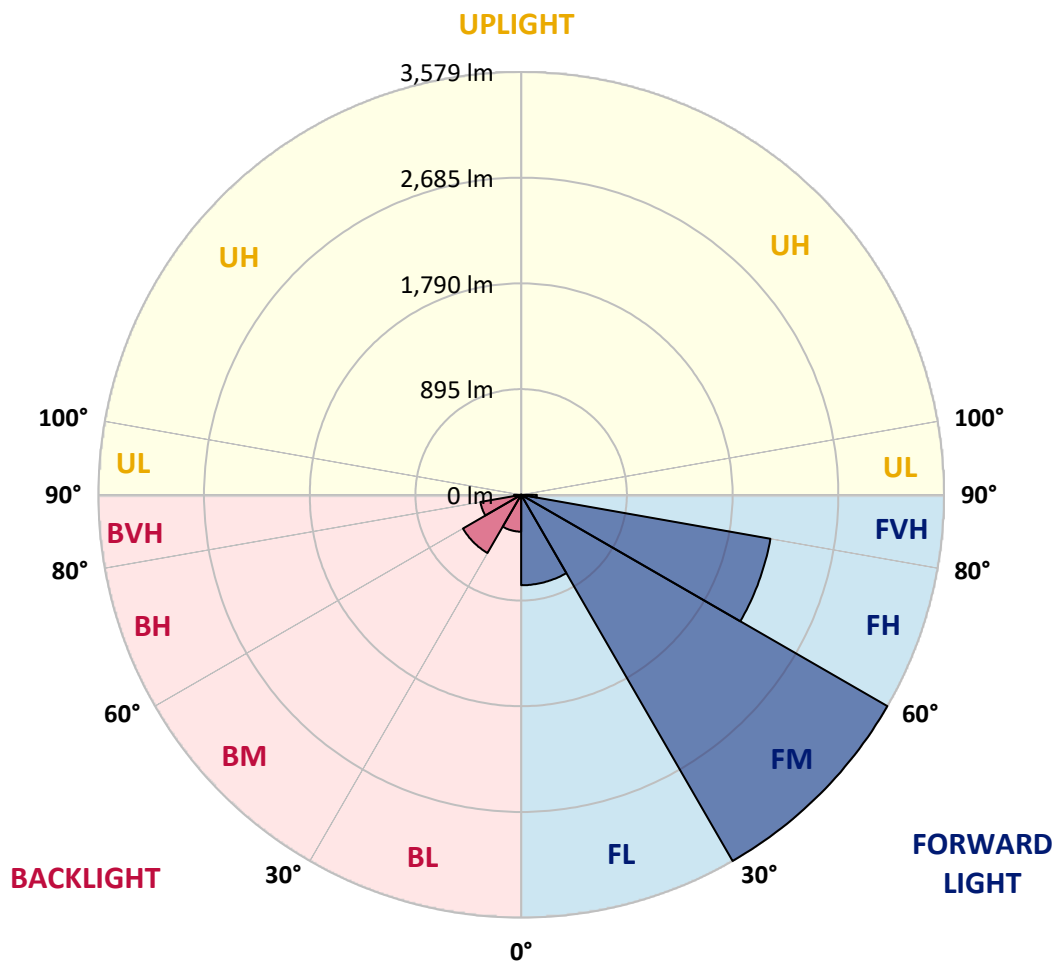
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	765.3	9.7			
FM	(30°-60°)	3579.4	45.2			
FH	(60°-80°)	2142.1	27.1			G2/5000
FVH	(80°-90°)	132.8	1.7			G2/225
BL	(0°-30°)	312.0	3.9	B1/500		
BM	(30°-60°)	568.7	7.2	B1/1000		
BH	(60°-80°)	350.3	4.4	B1/500		G1/500
BVH	(80°-90°)	60.6	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°	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3
2.5°	1260.8	1251.5	1250.4	1235.9	1222.3	1185.9	1159.9	1114.1	1068.4	1067.3	1021.6
5°	1457.4	1448.1	1442.9	1425.2	1402.3	1354.4	1307.6	1236.9	1158.9	1153.7	1067.3
7.5°	1590.6	1582.3	1571.9	1564.6	1542.7	1500.1	1442.9	1358.6	1251.5	1241.1	1120.4
10°	1680.0	1674.8	1672.8	1667.6	1654.0	1619.7	1564.6	1475.1	1344.0	1332.6	1176.6
12.5°	1718.5	1716.5	1725.8	1740.4	1745.6	1732.1	1679.0	1594.7	1446.0	1433.5	1244.2
15°	1673.8	1675.9	1699.8	1749.7	1802.8	1831.9	1800.7	1718.5	1561.5	1543.8	1323.2
17.5°	1653.0	1656.1	1672.8	1720.6	1795.5	1886.0	1900.6	1836.1	1672.8	1647.8	1406.5
20°	1689.4	1693.6	1706.1	1743.5	1795.5	1892.3	1968.2	1948.4	1782.0	1756.0	1486.6
22.5°	1782.0	1787.2	1786.2	1810.1	1845.5	1912.0	2005.7	2054.5	1896.4	1867.3	1569.8
25°	1979.6	1975.5	1940.1	1928.7	1938.0	1980.7	2055.6	2156.5	2016.1	1986.9	1657.2
27.5°	2248.0	2242.8	2178.3	2120.1	2068.1	2086.8	2126.3	2238.7	2137.8	2104.5	1740.4
30°	2535.2	2528.9	2454.0	2359.4	2243.9	2216.8	2211.6	2310.5	2260.5	2225.2	1828.8
32.5°	2815.0	2809.8	2729.7	2619.4	2460.3	2379.1	2329.2	2390.6	2399.9	2365.6	1925.6
35°	3069.9	3069.9	3001.2	2870.1	2690.2	2567.4	2485.2	2489.4	2560.1	2520.6	2035.8
37.5°	3296.6	3295.6	3220.7	3091.7	2919.0	2778.6	2676.6	2609.0	2713.0	2678.7	2151.3
40°	3476.6	3469.3	3414.2	3301.8	3128.1	2988.7	2885.7	2749.5	2883.7	2852.4	2274.0
42.5°	3607.7	3603.5	3566.1	3468.3	3302.9	3171.8	3101.1	2926.3	3077.1	3045.9	2417.6
45°	3658.7	3667.0	3667.0	3574.4	3443.3	3323.7	3292.5	3120.8	3286.2	3255.0	2571.6
47.5°	3576.5	3598.3	3643.1	3649.3	3533.8	3452.7	3463.1	3316.4	3501.6	3484.9	2740.1
50°	3319.5	3360.1	3457.9	3634.7	3570.2	3551.5	3608.7	3516.1	3732.5	3727.3	2945.0
52.5°	2656.9	2755.7	3060.5	3377.8	3545.3	3597.3	3753.3	3740.8	4030.0	4038.4	3212.4
55°	2037.9	2075.4	2428.0	2967.9	3392.3	3582.7	3850.1	3960.3	4352.5	4362.9	3457.9
57.5°	1647.8	1672.8	1865.2	2428.0	3043.9	3503.7	3926.0	4088.3	4600.1	4627.2	3676.3
60°	1305.5	1342.0	1471.0	1857.9	2556.0	3313.3	3979.1	4230.8	4866.4	4907.0	3937.5
62.5°	970.6	988.3	1110.0	1376.3	2023.3	2971.0	3951.0	4385.8	5193.1	5242.0	4251.6
65°	690.7	706.3	792.7	978.9	1495.9	2508.1	3787.7	4501.3	5602.9	5652.9	4567.9
67.5°	517.0	523.3	572.2	684.5	1008.0	1948.4	3456.8	4481.5	5902.5	5947.3	4694.8
70°	408.8	410.9	434.8	495.2	655.4	1356.5	2877.4	4191.3	5924.4	5963.9	4534.6
72.5°	339.1	338.1	351.6	380.7	456.7	858.2	2131.5	3652.4	5643.5	5670.6	4087.3
75°	279.8	281.9	291.3	307.9	348.5	565.9	1381.5	2913.8	4978.8	4949.6	3429.8
77.5°	235.1	234.1	238.2	252.8	281.9	406.7	809.3	2105.5	3689.9	3675.3	2251.2
80°	189.3	191.4	197.7	210.1	237.2	310.0	478.5	1313.9	1979.6	1926.6	1075.6
82.5°	126.9	146.7	159.2	173.7	204.9	228.9	303.8	667.9	885.3	871.8	487.9
85°	60.3	80.1	118.6	135.2	166.4	143.6	206.0	318.3	443.2	438.0	175.8
87.5°	12.5	12.5	63.5	75.9	103.0	61.4	114.4	138.4	214.3	200.8	71.8
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°	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3
2.5°	994.5	966.4	910.2	865.5	819.7	793.7	761.5	745.9	742.8	734.4	740.7
5°	1012.2	957.1	850.9	781.2	734.4	711.6	700.1	695.9	694.9	692.8	692.8
7.5°	1036.1	951.9	813.5	742.8	712.6	705.3	708.4	714.7	715.7	717.8	716.8
10°	1065.2	952.9	792.7	733.4	718.8	719.9	730.3	738.6	742.8	745.9	744.8
12.5°	1105.8	965.4	789.6	739.6	733.4	737.6	748.0	756.3	760.4	761.5	761.5
15°	1158.9	991.4	796.9	753.2	748.0	751.1	757.3	760.4	761.5	760.4	760.4
17.5°	1217.1	1022.6	807.3	761.5	753.2	750.0	748.0	744.8	738.6	734.4	734.4
20°	1273.3	1050.7	812.5	760.4	745.9	733.4	720.9	705.3	694.9	686.6	686.6
22.5°	1329.5	1076.7	812.5	749.0	726.1	702.2	676.2	651.2	635.6	625.2	625.2
25°	1388.8	1101.7	806.2	729.2	694.9	660.6	625.2	594.0	578.4	568.0	565.9
27.5°	1438.7	1116.2	789.6	701.1	656.4	612.7	572.2	539.9	528.5	519.1	519.1
30°	1491.8	1125.6	758.4	664.7	612.7	562.8	521.2	495.2	482.7	469.2	468.1
32.5°	1551.1	1131.8	723.0	626.2	568.0	514.9	479.6	458.8	431.7	417.2	415.1
35°	1619.7	1140.1	685.5	582.6	523.3	475.4	454.6	420.3	394.3	381.8	380.7
37.5°	1692.5	1146.4	645.0	544.1	482.7	449.4	428.6	388.0	365.1	346.4	344.3
40°	1769.5	1146.4	603.4	506.6	450.4	438.0	398.4	362.0	323.5	314.2	312.1
42.5°	1854.8	1144.3	561.8	470.2	420.3	412.0	380.7	342.3	322.5	314.2	312.1
45°	1945.3	1137.0	522.2	428.6	389.1	372.4	348.5	338.1	329.8	329.8	329.8
47.5°	2048.3	1130.8	477.5	391.1	366.2	347.5	329.8	323.5	322.5	325.6	328.7
50°	2180.4	1128.7	440.0	364.1	348.5	326.6	324.6	319.4	320.4	320.4	320.4
52.5°	2340.6	1110.0	404.7	344.3	330.8	304.8	311.0	316.2	318.3	317.3	316.2
55°	2458.2	1076.7	374.5	330.8	318.3	296.5	304.8	313.1	315.2	312.1	312.1
57.5°	2564.3	1029.9	350.6	320.4	310.0	291.3	300.6	309.0	306.9	305.8	304.8
60°	2686.0	985.1	331.8	315.2	301.7	289.2	297.5	302.7	299.6	297.5	296.5
62.5°	2818.1	941.5	318.3	315.2	295.4	288.2	294.4	296.5	290.2	288.2	288.2
65°	2879.5	872.8	303.8	315.2	292.3	286.1	288.2	286.1	279.8	279.8	278.8
67.5°	2778.6	759.4	285.0	311.0	296.5	283.0	278.8	275.7	268.4	268.4	266.3
70°	2499.8	624.2	258.0	297.5	297.5	281.9	266.3	259.0	250.7	253.8	249.7
72.5°	2135.7	495.2	224.7	274.6	291.3	280.9	252.8	241.3	234.1	237.2	230.9
75°	1730.0	383.9	185.2	238.2	275.7	275.7	239.3	223.7	215.3	215.3	208.1
77.5°	1102.7	284.0	150.8	197.7	247.6	268.4	227.8	203.9	191.4	188.3	183.1
80°	546.1	199.7	123.8	157.1	211.2	251.7	219.5	181.0	163.3	157.1	147.7
82.5°	290.2	138.4	98.8	122.8	168.5	226.8	209.1	156.0	134.2	124.8	114.4
85°	130.0	85.3	79.1	93.6	128.0	186.2	188.3	128.0	103.0	122.8	90.5
87.5°	47.9	38.5	38.5	47.9	73.9	78.0	133.2	82.2	65.5	44.7	35.4
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)