

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: P573270

Luminaire Tested: **ARCH-S-PA2-50-827-U-T3**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-50-827-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5892 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

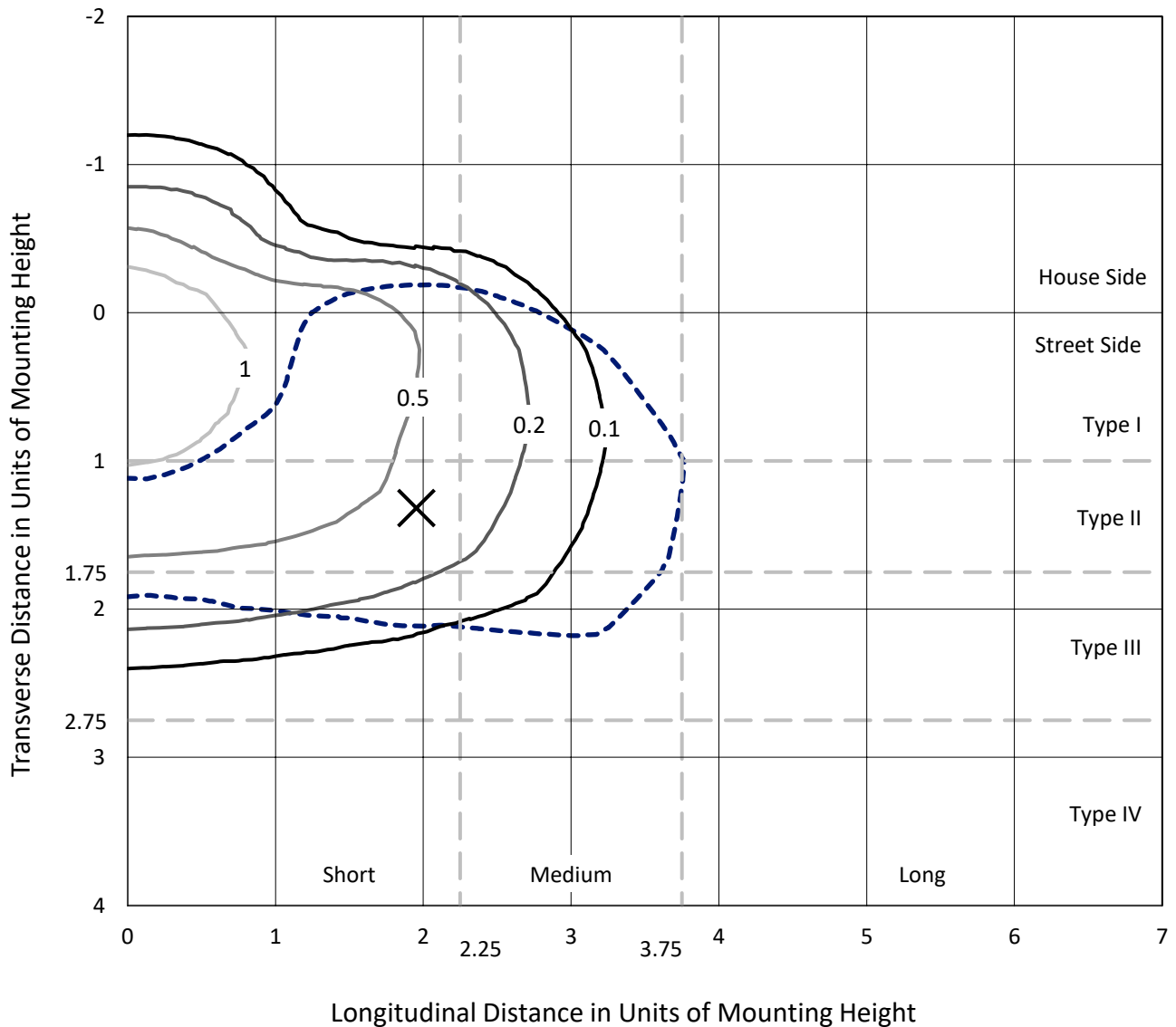
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

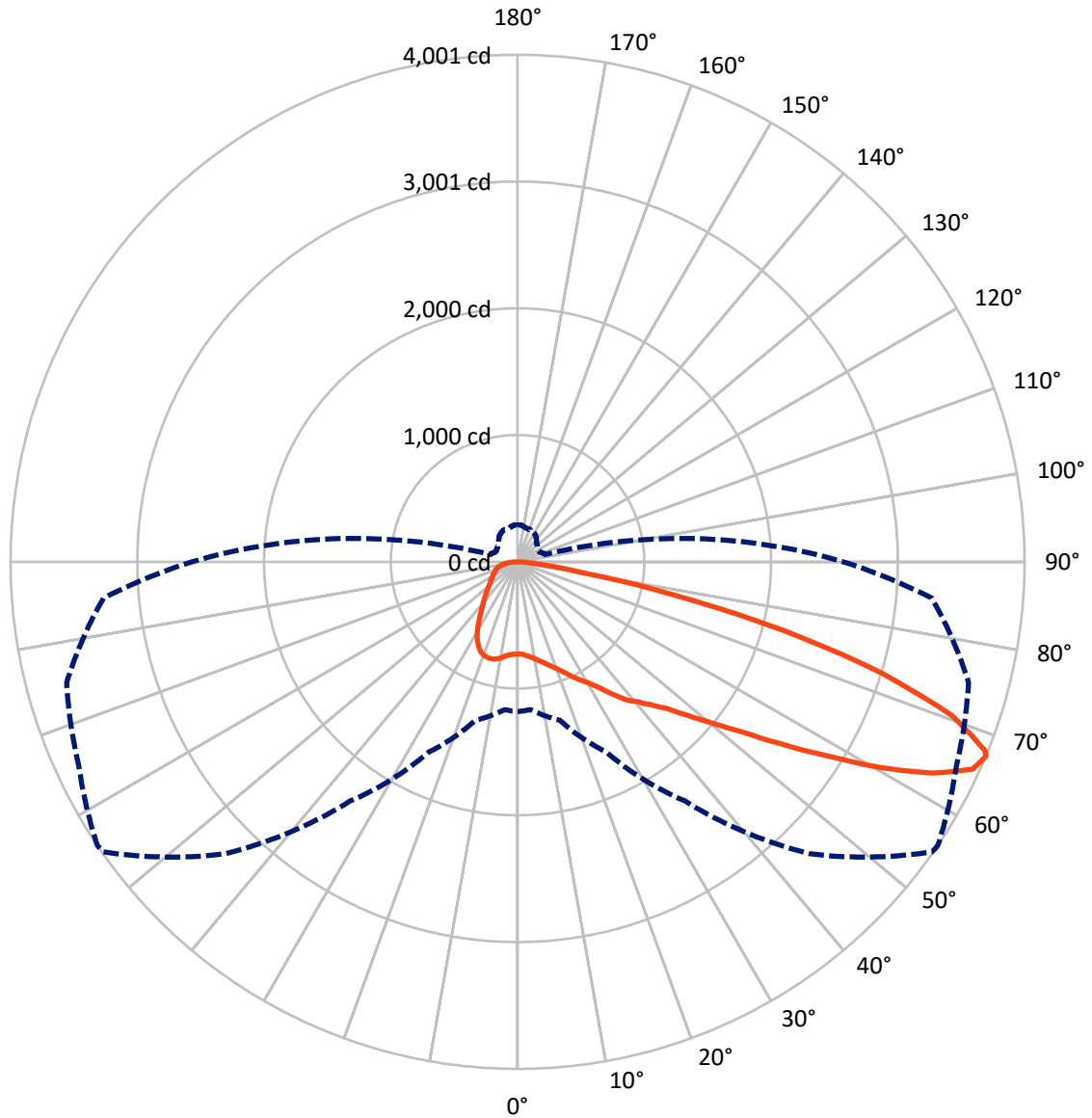
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type III - Short - N/A

REPORT NUMBER: P573270
CATALOG NUMBER: ARCH-S-PA2-50-827-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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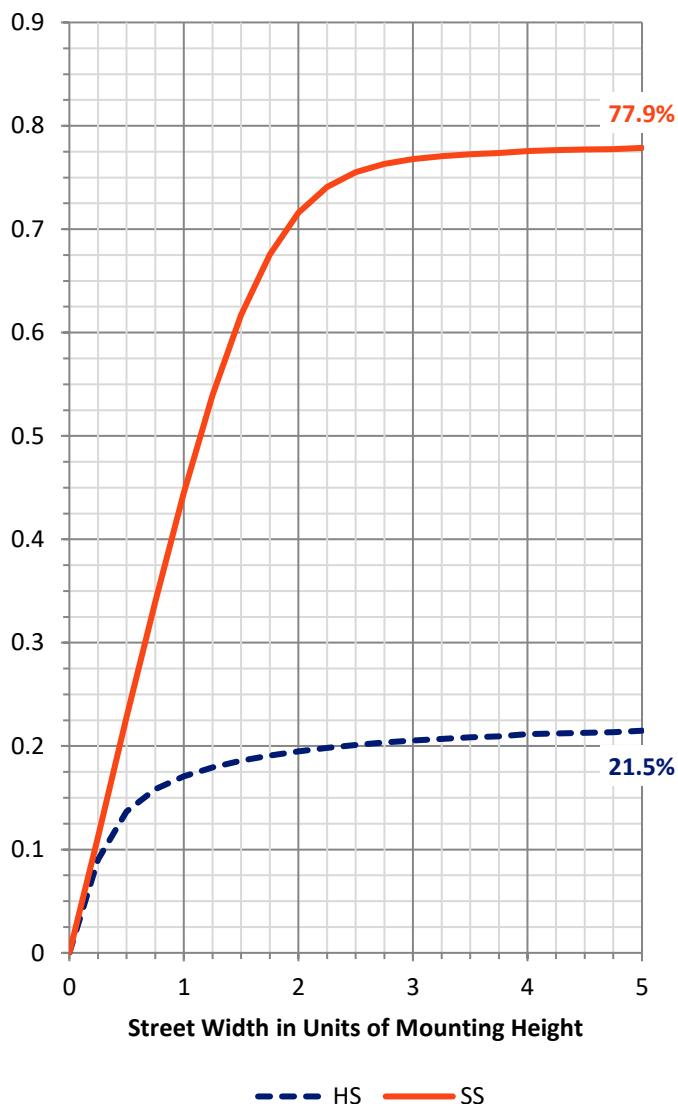
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1289.0	0.0	1289.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	4602.9	0.0	4602.9
	% Fixture	78.1	0.0	78.1
Total	Lumens	5892.0	0.0	5892.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	1.2
10°-20°	229.5	3.9
20°-30°	399.4	6.8
30°-40°	585.7	9.9
40°-50°	856.9	14.5
50°-60°	1339.2	22.7
60°-70°	1591.8	27.0
70°-80°	724.9	12.3
80°-90°	93.0	1.6
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°	5892.0	100.0
0°-180°	5892.0	100.0

Coefficient of Utilization



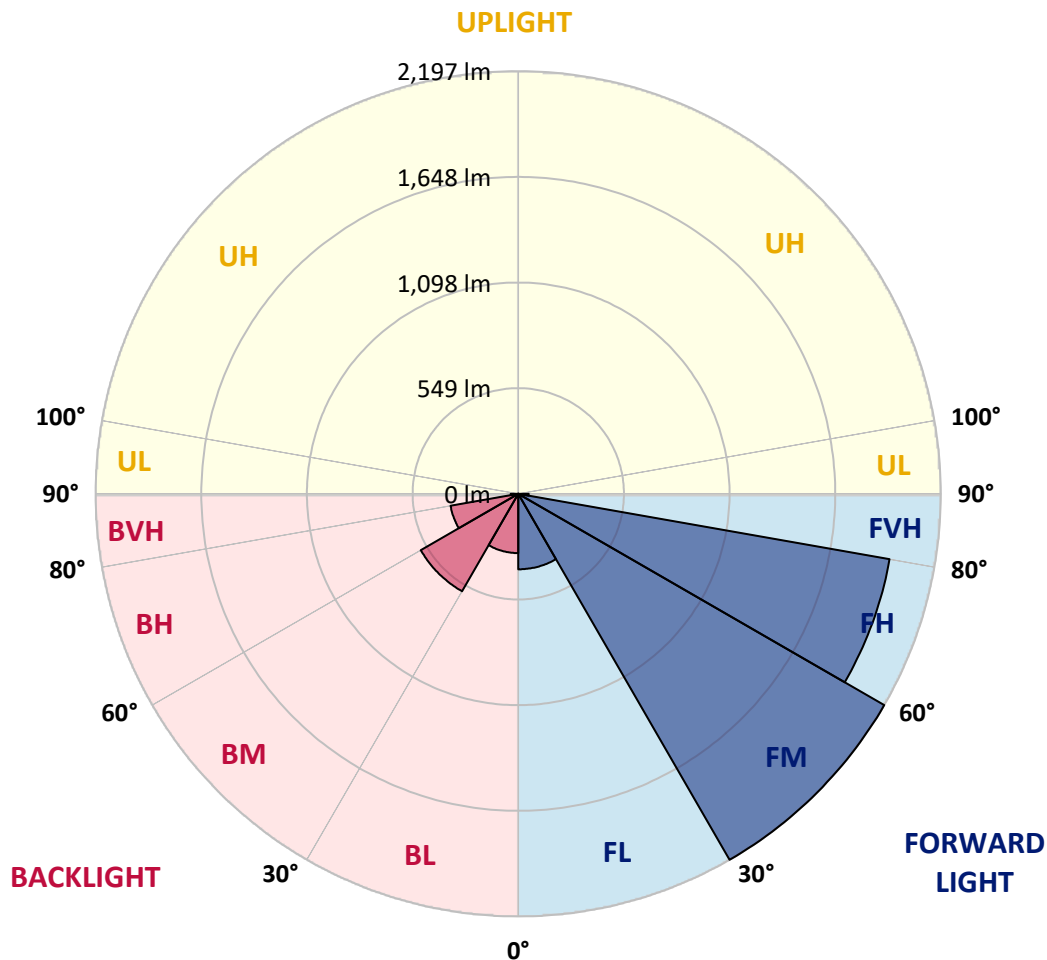
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 CATALOG NUMBER: ARCH-S-PA2-50-827-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	392.4	6.7			
FM (30°-60°)	2196.7	37.3			
FH (60°-80°)	1959.6	33.3			G2/5000
FVH (80°-90°)	54.2	0.9			G1/100
BL (0°-30°)	308.1	5.2	B1/500		
BM (30°-60°)	585.1	9.9	B1/1000		
BH (60°-80°)	357.1	6.1	B1/500		G1/500
BVH (80°-90°)	38.8	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4
2.5°	738.6	735.4	733.8	735.4	733.8	730.6	732.2	730.6	729.0	727.4	727.4
5°	748.2	745.0	743.4	745.0	746.6	743.4	743.4	743.4	738.6	737.0	733.8
7.5°	754.6	749.8	749.8	753.0	756.1	757.7	760.9	759.3	754.6	751.4	745.0
10°	775.3	768.9	768.9	768.9	772.1	775.3	778.5	780.1	778.5	776.9	772.1
12.5°	807.2	800.8	800.8	800.8	800.8	799.2	804.0	805.6	808.8	808.8	800.8
15°	850.3	842.3	839.1	832.7	831.1	827.9	834.3	834.3	839.1	840.7	832.7
17.5°	891.7	882.2	879.0	872.6	866.2	858.2	864.6	866.2	875.8	877.4	864.6
20°	934.8	931.6	926.8	917.3	906.1	898.1	904.5	902.9	910.9	914.1	898.1
22.5°	990.6	982.7	979.5	966.7	954.0	946.0	946.0	949.2	957.1	957.1	933.2
25°	1057.6	1046.5	1038.5	1024.1	1008.2	998.6	1000.2	1003.4	1014.6	1006.6	969.9
27.5°	1140.6	1129.4	1118.3	1089.6	1073.6	1054.5	1052.9	1056.1	1073.6	1052.9	1005.0
30°	1218.8	1214.0	1204.4	1182.1	1156.6	1124.6	1110.3	1111.9	1124.6	1095.9	1035.3
32.5°	1285.8	1279.4	1274.6	1258.6	1241.1	1202.8	1183.7	1185.3	1183.7	1148.6	1072.0
35°	1365.5	1356.0	1352.8	1338.4	1316.1	1290.6	1282.6	1279.4	1269.8	1222.0	1119.9
37.5°	1442.1	1432.5	1427.7	1419.8	1402.2	1379.9	1379.9	1378.3	1359.1	1292.1	1167.7
40°	1533.0	1521.9	1507.5	1502.7	1488.4	1472.4	1459.6	1451.7	1418.2	1357.6	1260.2
42.5°	1643.1	1636.7	1628.7	1608.0	1585.7	1582.5	1545.8	1542.6	1518.7	1483.6	1391.1
45°	1801.0	1788.3	1777.1	1770.7	1743.6	1714.9	1663.8	1651.1	1651.1	1643.1	1544.2
47.5°	1960.6	1938.2	1954.2	1949.4	1943.0	1911.1	1812.2	1813.8	1810.6	1831.3	1769.1
50°	2067.4	2054.7	2099.3	2120.1	2164.7	2164.7	2022.8	2005.2	2018.0	2078.6	1998.8
52.5°	2150.4	2142.4	2193.5	2274.8	2407.2	2420.0	2273.2	2236.5	2254.1	2340.2	2308.3
55°	2217.4	2209.4	2268.4	2410.4	2622.6	2700.7	2562.0	2546.0	2510.9	2603.4	2613.0
57.5°	2257.3	2239.7	2329.1	2518.9	2798.1	2978.3	2900.2	2895.4	2814.0	2900.2	2943.2
60°	2196.7	2185.5	2308.3	2563.6	2940.0	3239.9	3297.4	3297.4	3152.2	3198.5	3251.1
62.5°	2000.4	1986.1	2115.3	2459.9	2957.6	3453.7	3691.4	3672.3	3477.6	3476.0	3429.8
65°	1627.1	1609.6	1754.8	2118.5	2735.8	3479.2	3957.8	3946.6	3721.7	3657.9	3440.9
67°	1182.1	1170.9	1295.3	1655.9	2305.1	3257.5	3991.3	4000.9	3819.0	3683.4	3279.8
67.5°	1060.8	1059.2	1162.9	1520.3	2179.1	3176.1	3969.0	3978.5	3817.4	3662.7	3216.0
70°	494.5	516.9	614.2	871.0	1469.2	2501.3	3602.1	3638.8	3613.2	3423.4	2708.7
72.5°	229.7	239.3	282.4	421.1	789.6	1612.8	2919.3	3007.0	3118.7	2936.8	2145.6
75°	142.0	145.2	169.1	218.5	371.7	775.3	2078.6	2174.3	2343.4	2209.4	1371.9
77.5°	111.7	113.3	129.2	156.3	217.0	333.4	1140.6	1260.2	1480.4	1306.5	690.7
80°	83.0	86.1	98.9	121.2	153.1	170.7	485.0	529.6	714.7	547.2	287.1
82.5°	60.6	63.8	76.6	87.7	106.9	108.5	197.8	209.0	306.3	221.7	124.4
85°	51.0	51.0	59.0	65.4	71.8	60.6	97.3	95.7	118.0	100.5	49.5
87.5°	23.9	25.5	55.8	41.5	35.1	25.5	28.7	30.3	36.7	39.9	19.1
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°	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4	727.4
2.5°	725.8	725.8	725.8	727.4	729.0	729.0	730.6	730.6	732.2	733.8	737.0
5°	732.2	732.2	730.6	732.2	735.4	737.0	740.2	743.4	746.6	749.8	751.4
7.5°	745.0	743.4	743.4	743.4	746.6	749.8	754.6	757.7	762.5	764.1	767.3
10°	768.9	765.7	765.7	767.3	768.9	764.1	762.5	760.9	765.7	768.9	772.1
12.5°	797.6	794.4	792.8	788.1	781.7	772.1	764.1	757.7	759.3	762.5	767.3
15°	827.9	821.6	818.4	807.2	791.2	770.5	757.7	749.8	749.8	749.8	754.6
17.5°	859.8	853.5	840.7	820.0	789.6	760.9	745.0	730.6	724.2	722.6	725.8
20°	890.1	880.6	859.8	827.9	780.1	741.8	721.1	697.1	687.6	681.2	684.4
22.5°	918.9	906.1	877.4	827.9	764.1	713.1	676.4	644.5	628.5	625.3	626.9
25°	949.2	933.2	894.9	818.4	729.0	670.0	619.0	585.5	564.7	561.5	566.3
27.5°	979.5	955.6	909.3	792.8	689.1	611.0	556.7	524.8	513.7	507.3	508.9
30°	1005.0	982.7	923.6	757.7	634.9	542.4	492.9	478.6	470.6	467.4	467.4
32.5°	1038.5	1017.8	933.2	716.3	571.1	480.2	448.3	437.1	430.7	422.7	424.3
35°	1080.0	1060.8	928.4	663.6	510.5	438.7	413.2	397.2	382.9	371.7	370.1
37.5°	1135.8	1121.5	904.5	599.8	454.6	408.4	382.9	362.1	341.4	323.8	320.6
40°	1228.3	1194.8	869.4	529.6	416.4	384.5	354.1	328.6	303.1	284.0	279.2
42.5°	1346.4	1276.2	821.6	457.8	384.5	358.9	328.6	295.1	271.2	253.6	253.6
45°	1483.6	1363.9	764.1	403.6	351.0	333.4	296.7	268.0	253.6	242.5	240.9
47.5°	1646.3	1451.7	690.7	360.5	323.8	311.1	274.4	256.8	247.3	237.7	236.1
50°	1864.8	1569.7	636.5	323.8	296.7	285.5	268.0	253.6	244.1	237.7	236.1
52.5°	2115.3	1721.3	598.2	295.1	274.4	269.6	266.4	255.2	245.7	240.9	239.3
55°	2386.5	1907.9	561.5	271.2	256.8	263.2	269.6	258.4	252.0	245.7	242.5
57.5°	2641.7	2065.8	502.5	250.5	244.1	255.2	268.0	260.0	252.0	247.3	245.7
60°	2815.6	2145.6	421.1	231.3	231.3	244.1	263.2	252.0	244.1	245.7	245.7
62.5°	2871.4	2115.3	333.4	213.8	218.5	231.3	248.9	242.5	239.3	247.3	247.3
65°	2788.5	1992.5	266.4	199.4	205.8	215.4	240.9	247.3	256.8	274.4	276.0
67°	2571.5	1794.6	224.9	188.2	194.6	210.6	250.5	272.8	272.8	291.9	291.9
67.5°	2507.7	1727.6	218.5	185.0	193.0	210.6	255.2	279.2	272.8	295.1	295.1
70°	2038.7	1359.1	185.0	175.5	186.6	221.7	276.0	280.8	266.4	287.1	285.5
72.5°	1512.3	982.7	169.1	165.9	173.9	209.0	274.4	269.6	248.9	255.2	250.5
75°	934.8	569.5	156.3	153.1	157.9	185.0	253.6	245.7	221.7	217.0	212.2
77.5°	451.5	288.7	134.0	138.8	143.6	161.1	223.3	215.4	194.6	183.5	181.9
80°	196.2	148.4	114.9	122.8	124.4	137.2	185.0	175.5	156.3	138.8	138.8
82.5°	97.3	83.0	90.9	102.1	98.9	110.1	145.2	129.2	114.9	95.7	92.5
85°	44.7	47.9	67.0	76.6	67.0	68.6	98.9	90.9	71.8	54.2	55.8
87.5°	16.0	22.3	38.3	46.3	33.5	31.9	52.6	38.3	22.3	6.4	8.0
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)