

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: P799810

Luminaire Tested: **ARCH2-50-750-U-T2R-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-50-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5751 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

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: 24 FT



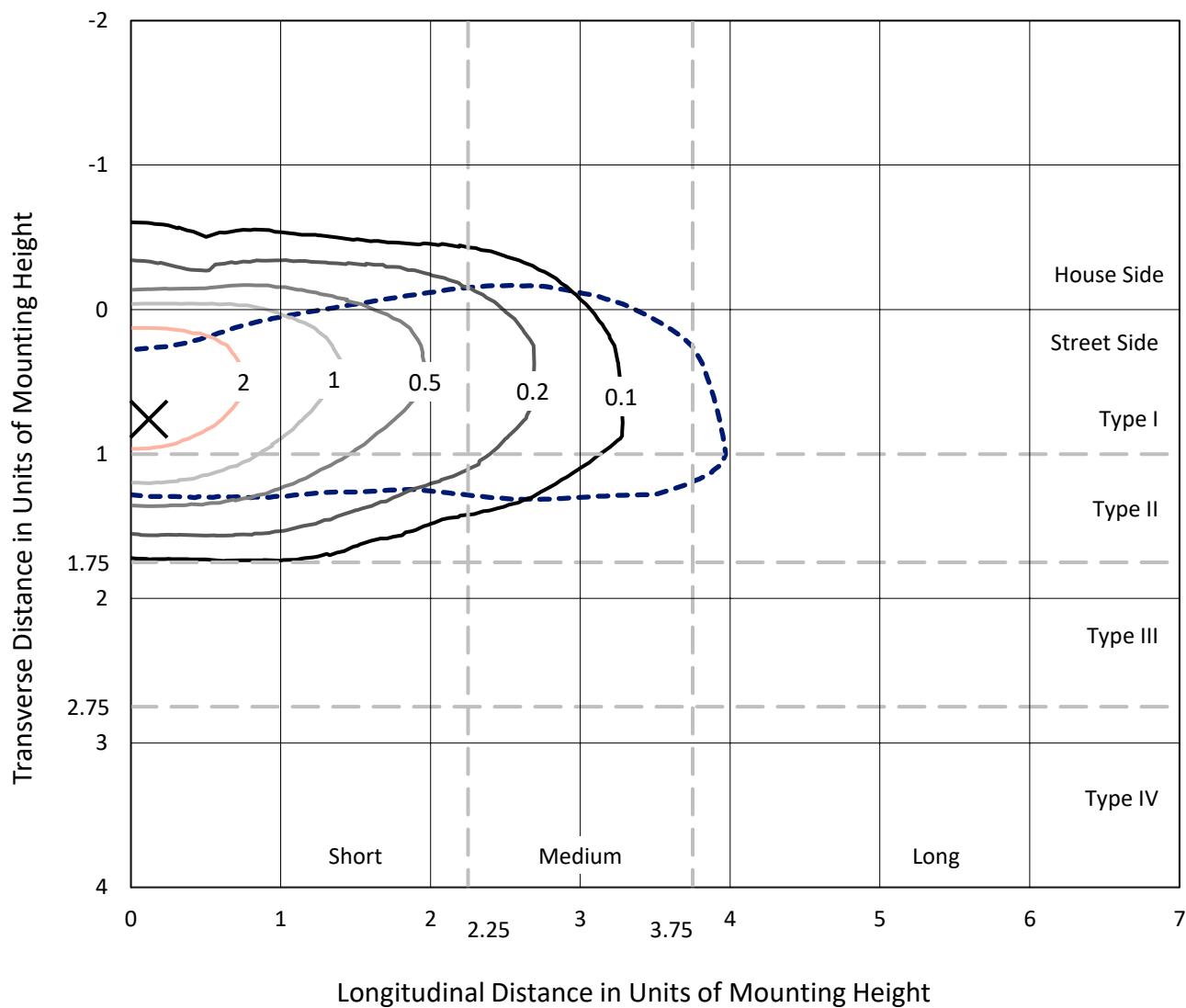
REPORT NUMBER: P799810

CATALOG NUMBER: ARCH2-50-750-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

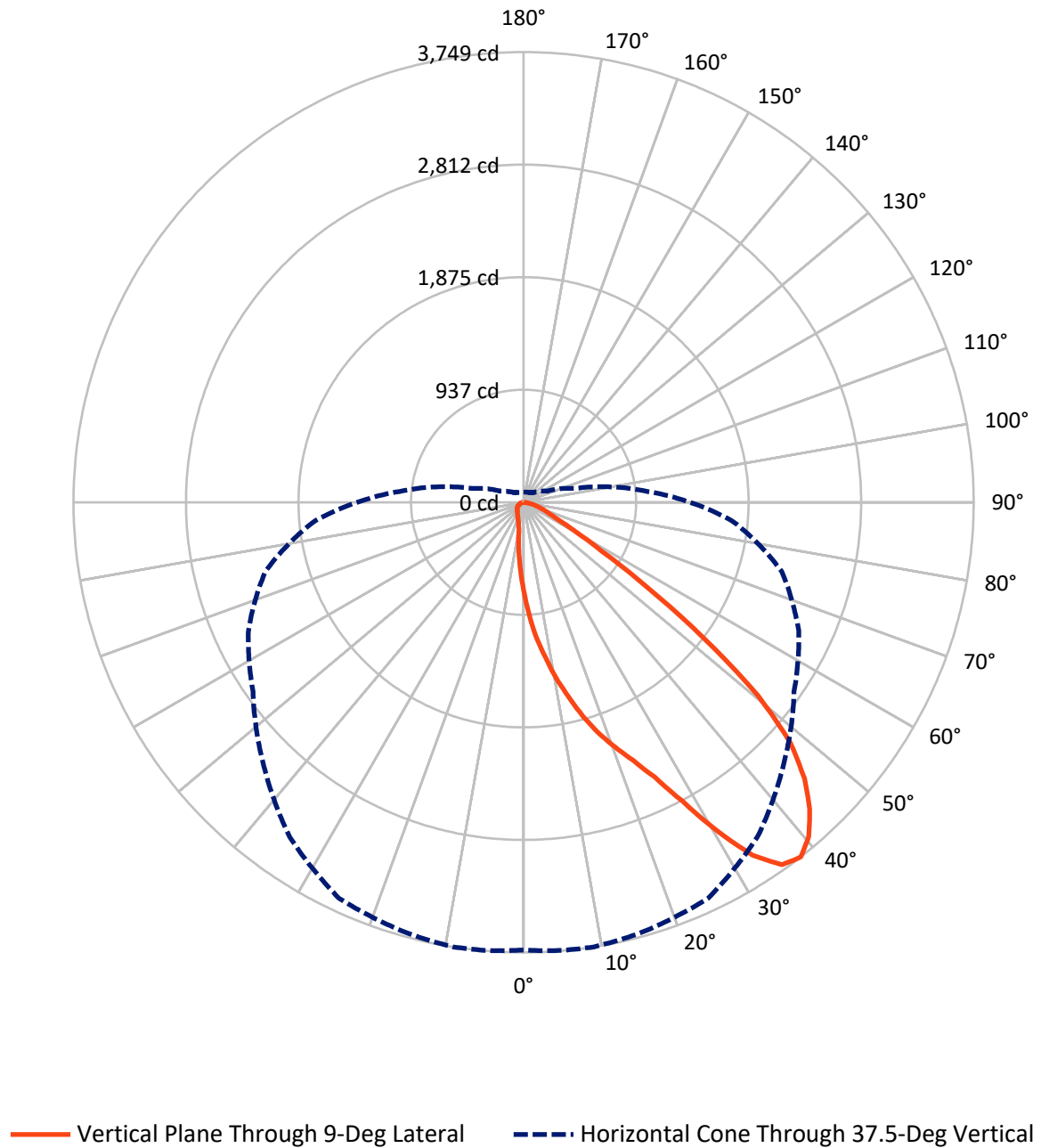
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type II - Short - N/A

REPORT NUMBER: P799810
CATALOG NUMBER: ARCH2-50-750-U-T2R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P799810

CATALOG NUMBER: ARCH2-50-750-U-T2R-HSS

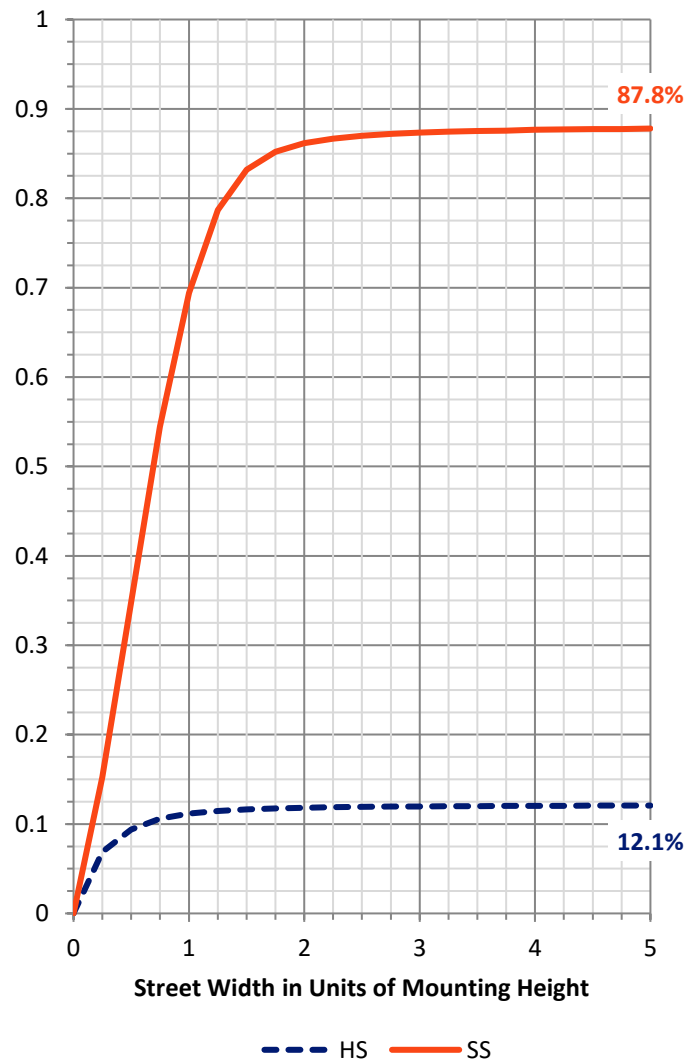
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	699.4	0.0	699.4
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	5051.6	0.0	5051.6
	% Fixture	87.8	0.0	87.8
Total	Lumens	5751.0	0.0	5751.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	1.3
10°-20°	265.6	4.6
20°-30°	545.7	9.5
30°-40°	964.6	16.8
40°-50°	1281.4	22.3
50°-60°	1215.3	21.1
60°-70°	927.2	16.1
70°-80°	449.5	7.8
80°-90°	25.3	0.4
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°	5751.0	100.0
0°-180°	5751.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799810

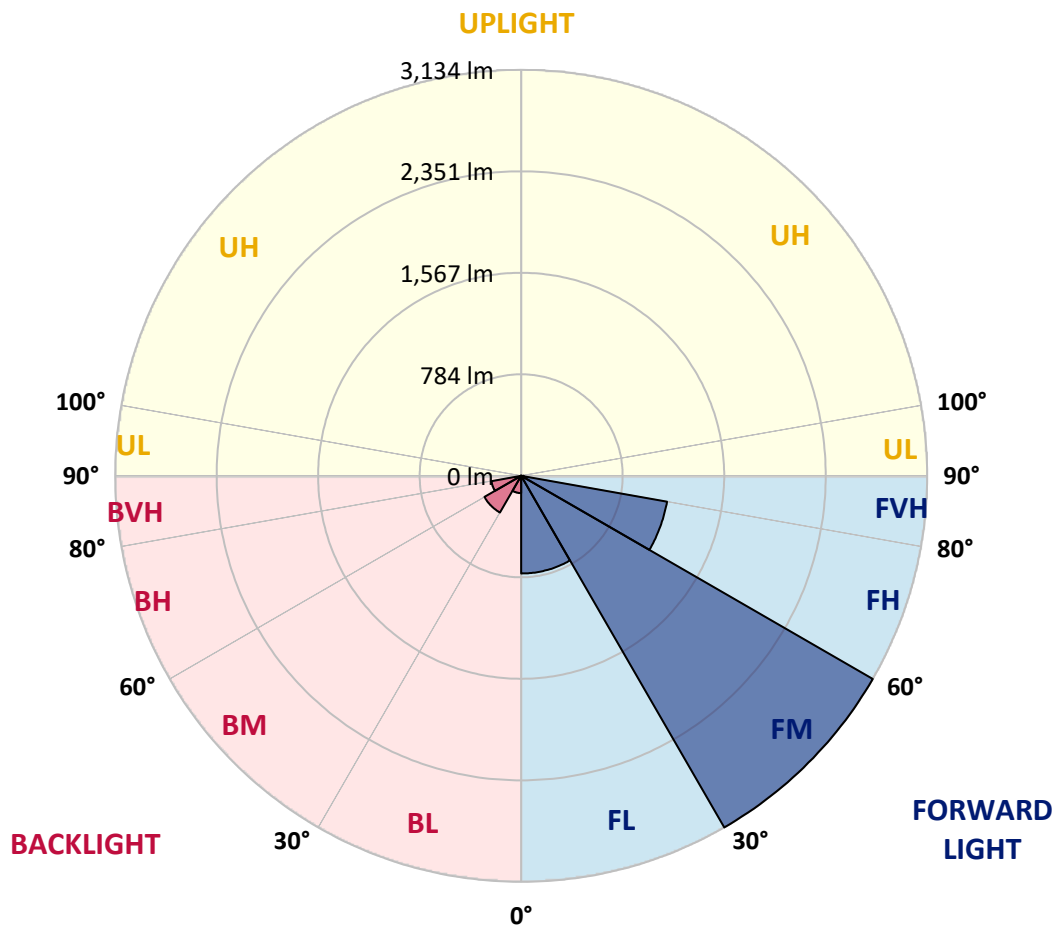
CATALOG NUMBER: ARCH2-50-750-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	754.2	13.1			
FM	(30°-60°)	3134.0	54.5			
FH	(60°-80°)	1143.3	19.9			G1/1800
FVH	(80°-90°)	20.0	0.3			G1/100
BL	(0°-30°)	133.5	2.3	B1/500		
BM	(30°-60°)	327.3	5.7	B1/1000		
BH	(60°-80°)	233.4	4.1	B1/500		G1/500
BVH	(80°-90°)	5.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



REPORT NUMBER: P799810

CATALOG NUMBER: ARCH2-50-750-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2
2.5°	942.0	925.5	944.4	942.0	925.5	914.9	881.8	871.2	832.2	803.9	779.1
5°	1135.6	1119.1	1135.6	1130.9	1107.3	1081.3	1027.0	991.6	921.9	860.6	805.1
7.5°	1296.1	1296.1	1303.2	1304.4	1276.1	1235.9	1168.6	1115.5	1017.6	923.1	834.6
10°	1469.7	1470.8	1486.2	1475.6	1437.8	1383.5	1298.5	1231.2	1113.2	989.2	862.9
12.5°	1655.0	1656.2	1660.9	1656.2	1611.3	1541.7	1439.0	1350.4	1214.7	1064.8	901.9
15°	1840.3	1841.5	1847.4	1839.1	1789.6	1708.1	1591.3	1482.7	1322.1	1149.8	949.1
17.5°	2013.9	2016.2	2020.9	2010.3	1958.4	1861.6	1742.4	1611.3	1436.6	1240.7	1002.2
20°	2169.7	2172.0	2175.6	2161.4	2109.5	2012.7	1884.0	1747.1	1553.5	1333.9	1060.0
22.5°	2326.7	2329.0	2334.9	2316.1	2258.2	2147.2	2020.9	1879.3	1677.4	1436.6	1127.3
25°	2527.4	2529.7	2534.4	2507.3	2428.2	2298.3	2165.0	2019.8	1812.0	1552.3	1210.0
27.5°	2821.3	2818.9	2818.9	2769.3	2633.6	2464.8	2310.1	2162.6	1957.2	1676.2	1300.9
30°	3184.9	3179.0	3175.4	3108.1	2914.5	2652.5	2458.9	2296.0	2096.5	1807.3	1398.8
32.5°	3510.7	3510.7	3503.6	3432.8	3227.4	2905.1	2617.1	2425.8	2231.1	1939.5	1500.4
35°	3703.1	3711.3	3707.8	3654.7	3504.8	3176.6	2830.7	2581.7	2372.7	2077.6	1621.9
37.5°	3729.1	3745.6	3749.1	3717.3	3638.2	3398.5	3068.0	2750.5	2528.5	2226.3	1740.0
40°	3624.0	3659.4	3659.4	3654.7	3626.4	3503.6	3267.5	2946.4	2689.1	2381.0	1859.2
42.5°	3462.3	3498.9	3494.1	3511.9	3504.8	3478.8	3379.6	3129.4	2849.6	2540.3	1967.8
45°	3251.0	3288.7	3279.3	3311.2	3325.3	3353.7	3367.8	3256.9	3007.8	2713.9	2089.4
47.5°	2912.2	2975.9	2990.1	3046.8	3105.8	3194.3	3261.6	3302.9	3155.4	2900.4	2221.6
50°	2411.7	2501.4	2529.7	2648.9	2810.7	2993.6	3102.2	3246.2	3259.2	3091.6	2364.5
52.5°	1727.0	1830.9	1874.6	2070.5	2403.4	2722.1	2918.1	3121.1	3299.4	3274.6	2519.1
55°	1116.7	1205.2	1247.7	1431.9	1874.6	2375.1	2700.9	2959.4	3276.9	3442.2	2696.2
57.5°	688.2	739.0	767.3	925.5	1332.7	1930.0	2416.4	2810.7	3208.5	3587.4	2880.3
60°	463.9	493.4	507.6	582.0	905.4	1442.5	2025.7	2654.8	3118.8	3685.4	3047.9
62.5°	308.1	317.5	331.7	377.7	597.3	1012.8	1555.8	2376.3	3051.5	3691.3	3171.9
65°	238.5	243.2	249.1	269.1	368.3	708.3	1094.3	1925.3	2951.1	3566.2	3210.8
67.5°	187.7	192.4	199.5	210.1	266.8	480.4	744.9	1410.6	2745.7	3370.2	3147.1
70°	147.6	151.1	155.8	165.3	207.8	348.2	492.2	937.3	2331.4	3183.7	2946.4
72.5°	116.9	120.4	125.1	134.6	168.8	255.0	337.6	584.3	1797.8	2955.9	2560.4
75°	92.1	94.4	98.0	107.4	135.8	198.3	229.0	349.4	1221.8	2539.2	1995.0
77.5°	46.0	56.7	64.9	74.4	99.2	136.9	152.3	193.6	515.9	1303.2	951.4
80°	27.2	33.1	35.4	41.3	64.9	82.6	82.6	77.9	162.9	500.5	388.4
82.5°	15.3	21.2	22.4	23.6	39.0	47.2	37.8	28.3	33.1	167.6	113.3
85°	4.7	7.1	8.3	9.4	13.0	14.2	13.0	11.8	9.4	16.5	10.6
87.5°	0.0	0.0	0.0	0.0	1.2	2.4	2.4	2.4	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P799810

CATALOG NUMBER: ARCH2-50-750-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2	760.2
2.5°	764.9	749.6	720.1	692.9	667.0	648.1	630.4	613.8	602.0	592.6	591.4
5°	775.6	744.9	688.2	635.1	586.7	546.6	512.3	485.2	465.1	450.9	449.8
7.5°	789.7	742.5	656.3	577.2	505.2	447.4	397.8	361.2	335.2	324.6	316.4
10°	801.5	740.1	624.5	519.4	425.0	351.8	292.8	256.2	237.3	230.2	226.6
12.5°	821.6	742.5	597.3	466.3	355.3	269.1	224.3	204.2	196.0	190.1	188.9
15°	851.1	753.1	571.3	414.3	284.5	217.2	191.2	178.2	170.0	168.8	167.6
17.5°	880.6	762.6	547.7	361.2	236.1	188.9	171.2	160.5	154.6	153.5	153.5
20°	914.9	774.4	521.8	310.5	201.9	170.0	155.8	147.6	140.5	139.3	139.3
22.5°	955.0	790.9	497.0	265.6	179.4	155.8	144.0	134.6	128.7	127.5	127.5
25°	1009.3	815.7	476.9	232.5	164.1	144.0	133.4	125.1	120.4	118.0	118.0
27.5°	1069.5	849.9	462.7	212.5	153.5	134.6	123.9	116.9	112.1	109.8	109.8
30°	1136.8	887.7	453.3	204.2	147.6	126.3	116.9	109.8	103.9	102.7	102.7
32.5°	1211.1	931.4	447.4	205.4	146.4	120.4	109.8	102.7	98.0	95.6	95.6
35°	1293.8	979.8	443.9	212.5	148.7	115.7	103.9	96.8	92.1	89.7	89.7
37.5°	1385.9	1036.4	443.9	219.6	154.6	114.5	98.0	90.9	87.4	85.0	85.0
40°	1472.0	1096.6	448.6	227.8	160.5	114.5	93.3	87.4	82.6	80.3	80.3
42.5°	1539.3	1130.9	452.1	236.1	164.1	113.3	88.5	82.6	79.1	76.7	76.7
45°	1616.0	1167.5	445.0	239.6	164.1	111.0	85.0	79.1	75.5	73.2	73.2
47.5°	1701.0	1212.3	443.9	242.0	160.5	106.2	81.5	75.5	73.2	70.8	70.8
50°	1787.2	1261.9	446.2	240.8	155.8	99.2	76.7	73.2	69.6	67.3	67.3
52.5°	1885.2	1313.8	450.9	238.5	145.2	90.9	73.2	69.6	66.1	63.7	62.6
55°	1993.8	1370.5	460.4	233.7	131.0	82.6	69.6	66.1	61.4	59.0	57.8
57.5°	2118.9	1440.2	471.0	224.3	115.7	75.5	66.1	61.4	54.3	50.8	49.6
60°	2238.1	1519.2	482.8	201.9	100.3	68.5	62.6	55.5	48.4	46.0	44.9
62.5°	2350.3	1597.2	488.7	161.7	85.0	62.6	59.0	50.8	43.7	41.3	40.1
65°	2422.3	1682.1	475.7	109.8	69.6	57.8	54.3	47.2	40.1	36.6	36.6
67.5°	2427.0	1722.3	430.9	72.0	56.7	51.9	49.6	42.5	35.4	33.1	31.9
70°	2307.8	1662.1	329.3	56.7	47.2	44.9	44.9	37.8	30.7	28.3	27.2
72.5°	2033.9	1472.0	210.1	46.0	40.1	37.8	37.8	31.9	27.2	23.6	22.4
75°	1605.4	1135.6	112.1	37.8	33.1	31.9	29.5	26.0	22.4	20.1	18.9
77.5°	737.8	500.5	51.9	27.2	24.8	24.8	22.4	18.9	17.7	15.3	15.3
80°	291.6	170.0	26.0	17.7	16.5	16.5	16.5	13.0	13.0	10.6	9.4
82.5°	80.3	35.4	13.0	10.6	10.6	10.6	9.4	8.3	8.3	7.1	7.1
85°	8.3	5.9	5.9	5.9	5.9	4.7	4.7	3.5	2.4	2.4	2.4
87.5°	3.5	3.5	3.5	3.5	3.5	2.4	1.2	0.0	0.0	0.0	0.0
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)