

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: P398172

Luminaire Tested: **ARCH-S-PA1-90-830-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398172
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6529 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

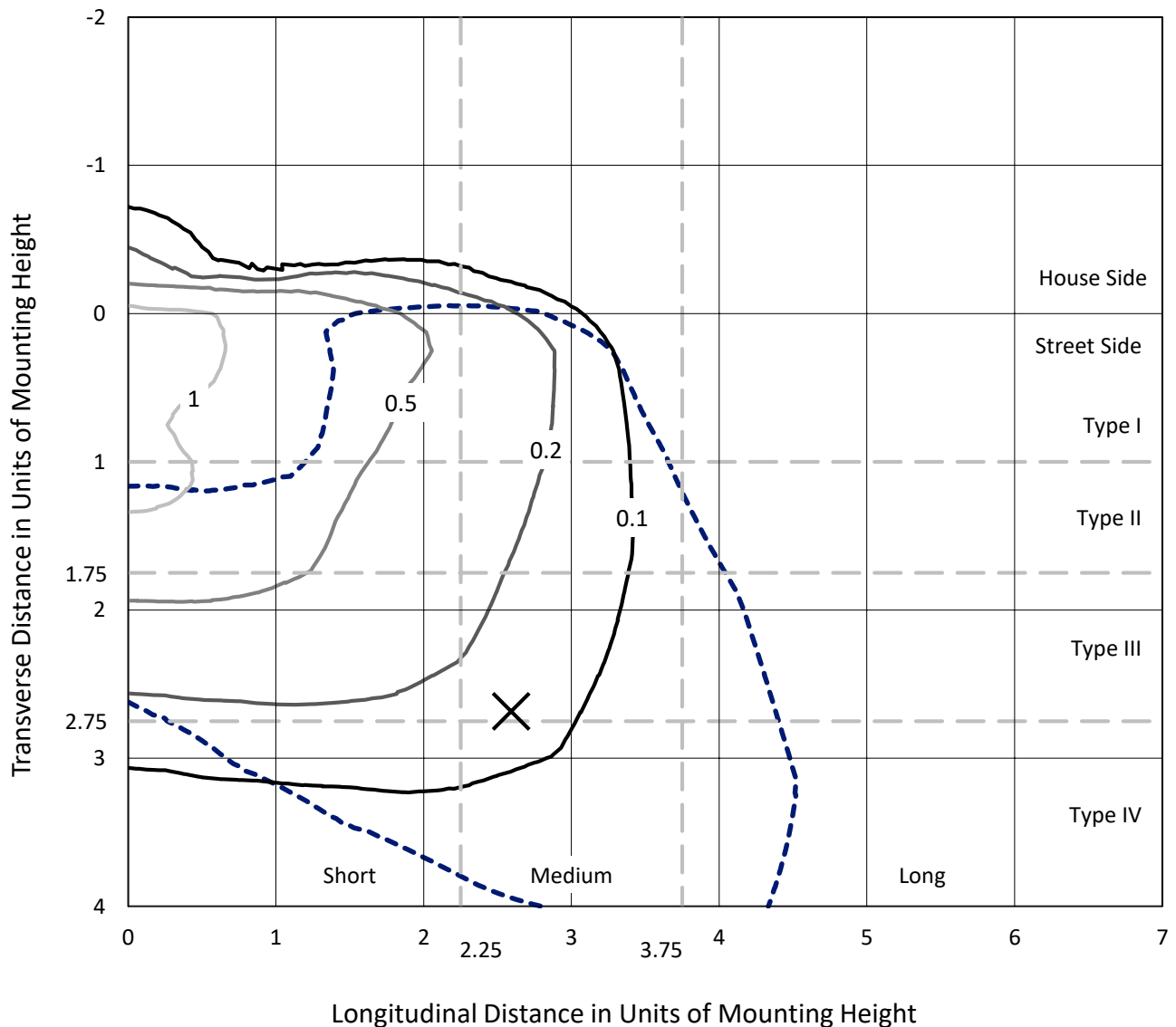
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398172
 CATALOG NUMBER: ARCH-S-PA1-90-830-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

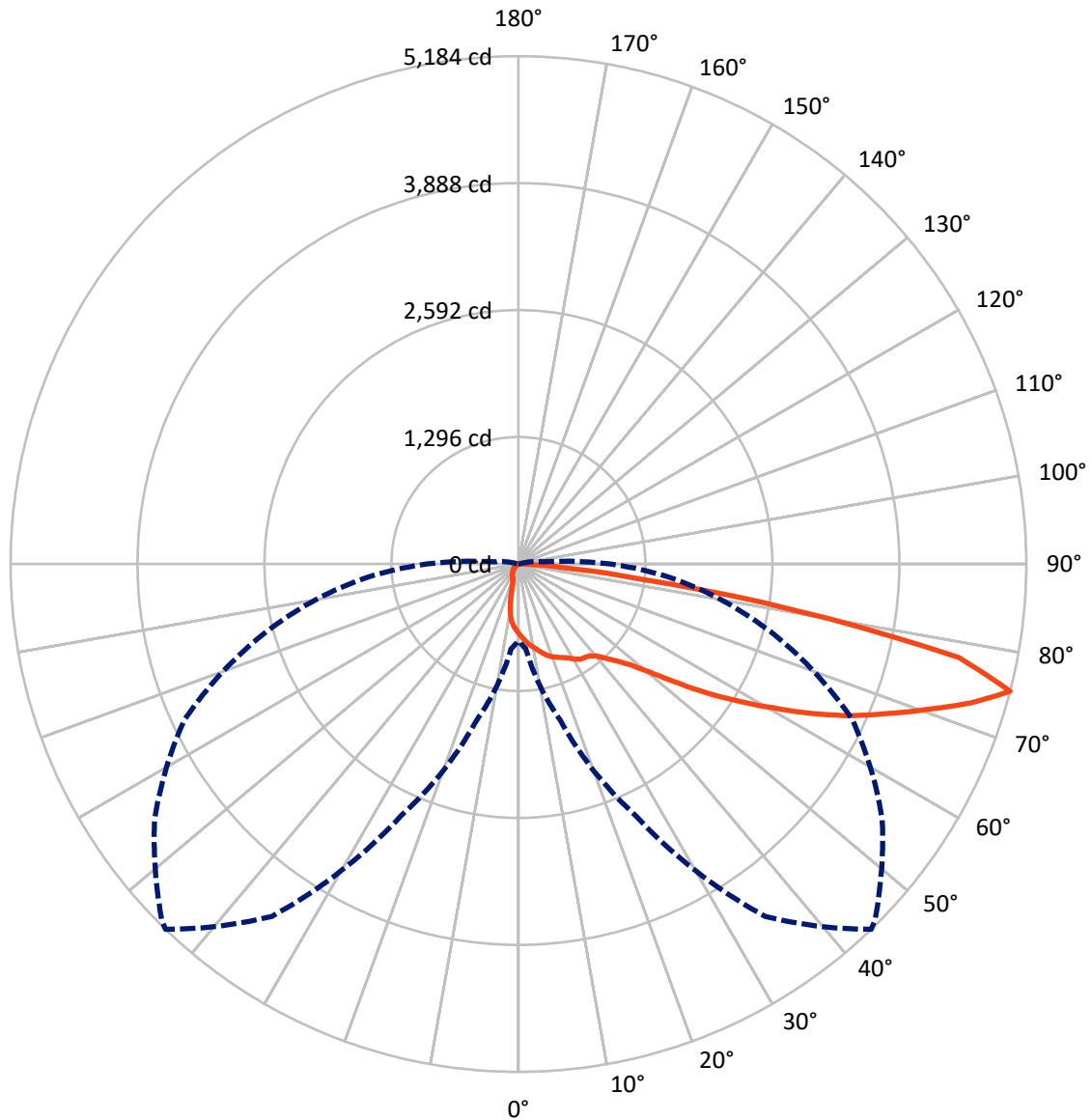


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P398172

CATALOG NUMBER: ARCH-S-PA1-90-830-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



REPORT NUMBER: P398172

CATALOG NUMBER: ARCH-S-PA1-90-830-U-T4W-HSS

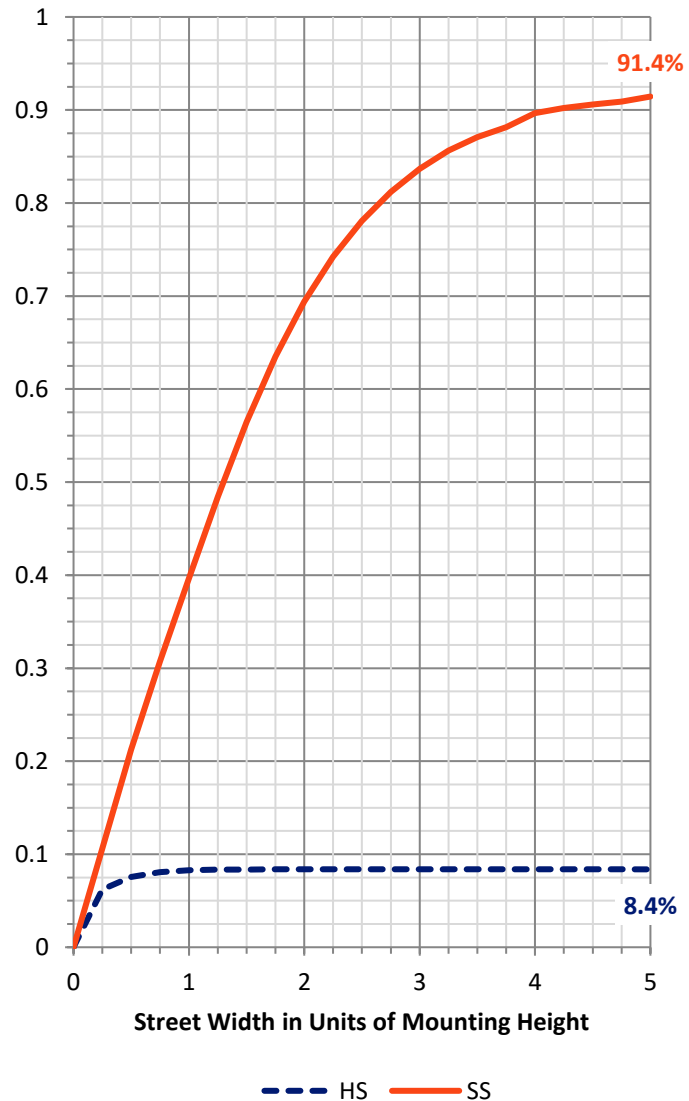
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	550.6	0.0	550.6
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	5978.4	0.0	5978.4
	% Fixture	91.6	0.0	91.6
Total	Lumens	6529.0	0.0	6529.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	1.0
10°-20°	187.8	2.9
20°-30°	309.9	4.7
30°-40°	449.8	6.9
40°-50°	731.2	11.2
50°-60°	1289.0	19.7
60°-70°	1852.6	28.4
70°-80°	1483.5	22.7
80°-90°	158.1	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°	6529.0	100.0
0°-180°	6529.0	100.0



REPORT NUMBER: P398172

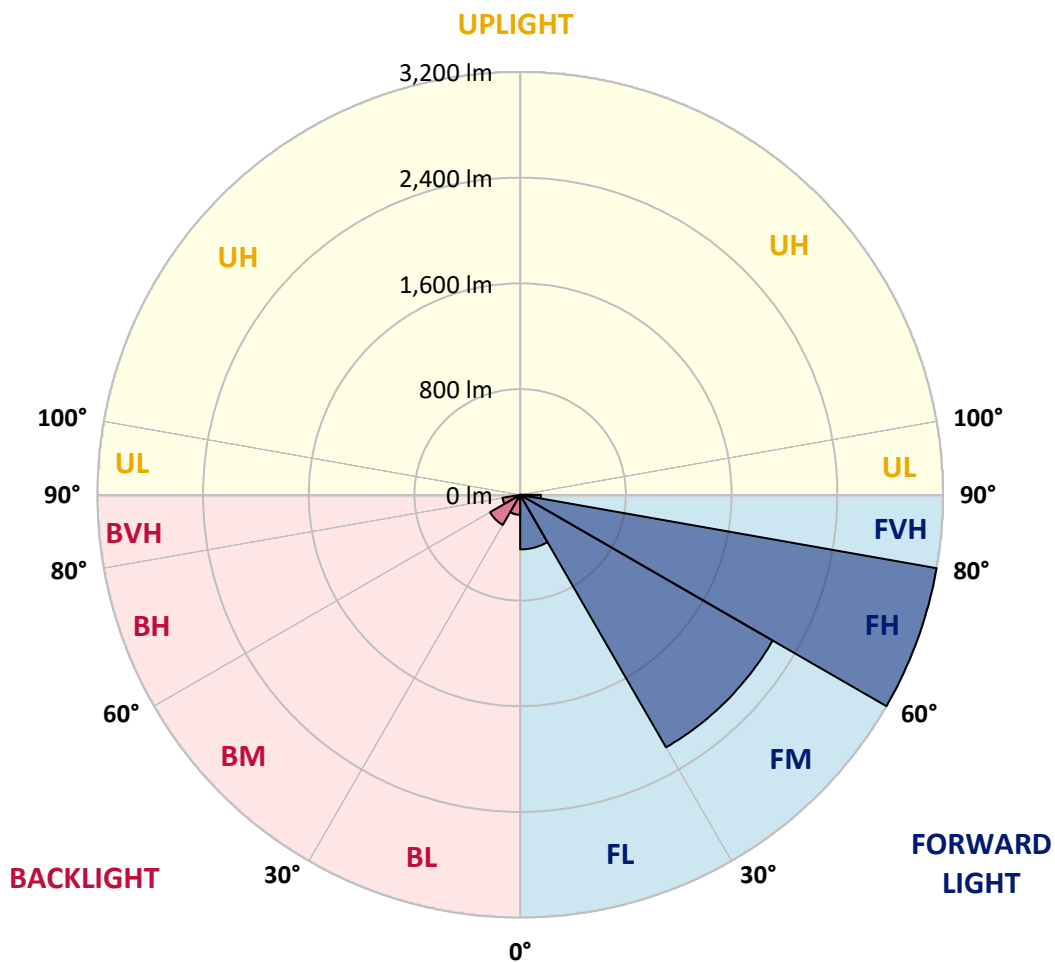
CATALOG NUMBER: ARCH-S-PA1-90-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	413.5	6.3			
FM	(30°-60°)	2206.9	33.8			
FH	(60°-80°)	3200.4	49.0			G2/5000
FVH	(80°-90°)	157.7	2.4			G2/225
BL	(0°-30°)	151.3	2.3	B1/500		
BM	(30°-60°)	263.2	4.0	B1/1000		
BH	(60°-80°)	135.7	2.1	B1/500		G1/500
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





REPORT NUMBER: P398172

CATALOG NUMBER: ARCH-S-PA1-90-830-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7
2.5°	774.5	773.3	769.7	763.7	757.6	751.6	750.4	740.8	729.9	721.5	714.3
5°	843.2	841.9	835.9	822.7	809.4	793.8	792.6	769.7	749.2	726.3	707.0
7.5°	914.2	911.8	901.0	880.5	857.6	833.5	831.1	797.4	767.3	737.2	709.5
10°	969.6	967.2	951.6	927.5	896.2	866.0	862.4	827.5	797.4	758.8	721.5
12.5°	1023.8	1019.0	998.5	972.0	933.5	904.6	901.0	864.8	828.7	788.9	743.2
15°	1074.4	1068.4	1049.1	1015.4	974.4	946.7	944.3	905.8	868.4	822.7	772.1
17.5°	1109.3	1106.9	1084.1	1046.7	1007.0	984.1	981.7	941.9	904.6	856.4	802.2
20°	1127.4	1127.4	1105.7	1064.8	1028.6	1013.0	1009.4	972.0	935.9	890.1	833.5
22.5°	1131.0	1134.6	1117.8	1073.2	1046.7	1033.5	1031.1	998.5	963.6	921.4	868.4
25°	1138.3	1138.3	1129.8	1081.6	1062.4	1058.8	1057.6	1028.6	997.3	955.2	903.4
27.5°	1146.7	1146.7	1140.7	1093.7	1086.5	1085.3	1084.1	1070.8	1045.5	996.1	944.3
30°	1168.4	1169.6	1164.8	1117.8	1113.0	1126.2	1128.6	1121.4	1090.1	1028.6	986.5
32.5°	1222.6	1211.7	1198.5	1134.6	1143.1	1159.9	1161.1	1146.7	1113.0	1063.6	1037.1
35°	1358.7	1294.8	1234.6	1149.1	1152.7	1169.6	1172.0	1170.8	1150.3	1108.1	1094.9
37.5°	1485.2	1394.8	1309.3	1182.8	1170.8	1188.8	1193.7	1214.1	1198.5	1169.6	1173.2
40°	1558.6	1523.7	1463.5	1275.6	1206.9	1234.6	1239.4	1270.8	1264.7	1252.7	1275.6
42.5°	1785.1	1787.5	1722.4	1414.1	1273.2	1317.7	1323.7	1349.0	1357.5	1363.5	1418.9
45°	2047.7	2056.1	2040.4	1663.4	1398.4	1412.9	1421.3	1455.0	1486.4	1524.9	1626.1
47.5°	2363.2	2356.0	2298.2	1968.2	1616.4	1535.7	1541.8	1606.8	1661.0	1745.3	1889.9
50°	2642.7	2660.7	2551.1	2252.4	1923.6	1729.7	1723.6	1787.5	1885.0	2003.1	2185.0
52.5°	2924.5	2898.0	2749.9	2534.3	2287.4	1993.5	1975.4	2010.3	2147.6	2287.4	2474.0
55°	2999.2	3001.6	2951.0	2842.6	2590.9	2313.9	2283.7	2281.3	2452.4	2547.5	2777.6
57.5°	3146.2	3152.2	3164.2	3185.9	3066.7	2634.2	2602.9	2569.2	2735.4	2790.8	3082.3
60°	3295.5	3302.7	3376.2	3493.1	3413.6	2979.9	2946.2	2866.7	2959.5	3034.1	3402.7
62.5°	3276.2	3326.8	3540.0	3772.5	3762.9	3359.4	3317.2	3125.7	3184.7	3249.7	3696.6
65°	2958.3	3012.5	3491.9	3849.6	4113.4	3734.0	3665.3	3393.1	3396.7	3475.0	3979.7
67.5°	2674.0	2733.0	3190.7	3817.1	4344.6	4070.0	3999.0	3661.7	3605.1	3735.2	4131.4
70°	2510.2	2569.2	2951.0	3715.9	4409.7	4442.2	4380.8	3968.8	3853.2	3972.5	3961.6
72.5°	1964.5	2057.3	2645.1	3523.2	4479.5	4840.9	4792.7	4357.9	4064.0	3724.3	3016.1
75°	782.9	868.4	1651.4	2835.4	4391.6	5184.2	5146.8	4532.5	3761.7	2659.5	1544.2
77.5°	236.1	252.9	458.9	1402.0	3219.6	4596.4	4584.3	3811.0	2662.0	1234.6	421.6
80°	78.3	86.7	140.9	386.6	1469.5	2871.5	2925.7	2428.3	1209.3	283.1	85.5
82.5°	32.5	36.1	71.1	155.4	520.3	1237.0	1219.0	1087.7	421.6	175.9	31.3
85°	8.4	10.8	32.5	89.1	190.3	426.4	448.1	365.0	238.5	145.7	9.6
87.5°	0.0	0.0	15.7	36.1	85.5	128.9	134.9	110.8	134.9	109.6	4.8
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: P398172

CATALOG NUMBER: ARCH-S-PA1-90-830-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7	710.7
2.5°	708.2	702.2	691.4	684.2	674.5	672.1	667.3	661.3	660.1	654.0	655.2
5°	696.2	686.6	667.3	654.0	638.4	633.6	625.1	619.1	614.3	605.9	607.1
7.5°	693.8	679.3	652.8	627.5	602.3	584.2	558.9	538.4	521.5	503.5	507.1
10°	702.2	684.2	646.8	611.9	566.1	508.3	442.1	398.7	377.0	355.3	357.7
12.5°	719.1	697.4	649.2	596.2	503.5	404.7	313.2	254.2	238.5	228.9	230.1
15°	744.4	717.9	656.5	566.1	419.2	292.7	208.4	183.1	189.1	192.7	192.7
17.5°	770.9	740.8	662.5	511.9	324.0	204.8	169.8	167.4	175.9	184.3	184.3
20°	803.4	764.9	663.7	443.3	233.7	166.2	160.2	160.2	166.2	175.9	175.9
22.5°	834.7	791.4	652.8	365.0	178.3	154.2	154.2	154.2	157.8	167.4	168.6
25°	872.1	823.9	630.0	281.9	153.0	146.9	146.9	148.2	150.6	159.0	160.2
27.5°	911.8	857.6	591.4	206.0	139.7	138.5	139.7	140.9	142.1	150.6	153.0
30°	957.6	894.9	542.0	154.2	127.7	127.7	131.3	133.7	133.7	140.9	143.3
32.5°	1010.6	944.3	483.0	127.7	115.6	114.4	120.5	124.1	124.1	130.1	132.5
35°	1076.8	994.9	411.9	113.2	106.0	103.6	106.0	112.0	114.4	119.2	120.5
37.5°	1164.8	1055.1	336.1	104.8	98.8	94.0	94.0	95.2	100.0	104.8	106.0
40°	1276.8	1121.4	261.4	98.8	91.5	86.7	83.1	81.9	80.7	84.3	86.7
42.5°	1417.7	1196.1	195.1	92.7	85.5	78.3	73.5	68.7	62.6	61.4	62.6
45°	1598.4	1287.6	144.5	87.9	81.9	71.1	62.6	54.2	43.4	39.7	41.0
47.5°	1811.6	1382.8	113.2	83.1	79.5	62.6	51.8	37.3	26.5	24.1	25.3
50°	2038.0	1474.3	96.4	77.1	74.7	54.2	37.3	22.9	15.7	15.7	16.9
52.5°	2230.7	1526.1	87.9	72.3	67.5	44.6	24.1	13.2	9.6	9.6	10.8
55°	2417.4	1553.8	81.9	67.5	57.8	31.3	13.2	8.4	6.0	6.0	6.0
57.5°	2610.2	1565.9	74.7	61.4	45.8	19.3	7.2	4.8	3.6	3.6	3.6
60°	2781.2	1543.0	63.8	50.6	30.1	9.6	3.6	3.6	2.4	1.2	1.2
62.5°	2924.5	1499.6	44.6	36.1	18.1	4.8	2.4	1.2	0.0	0.0	0.0
65°	3012.5	1429.7	28.9	24.1	10.8	3.6	1.2	0.0	0.0	0.0	0.0
67.5°	2987.2	1298.5	18.1	15.7	4.8	2.4	1.2	0.0	0.0	0.0	0.0
70°	2695.7	1064.8	13.2	9.6	3.6	1.2	0.0	0.0	0.0	0.0	0.0
72.5°	1942.9	720.3	9.6	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	934.7	256.6	6.0	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	228.9	56.6	3.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	50.6	10.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.9	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	1.2	0.0	0.0	0.0	0.0	0.0	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)