

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: P398073

Luminaire Tested: **ARCH-S-PA1-80-750-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398073
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-PA1-80-750-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1050mA 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: 7664 lumens
Efficiency: N/A
Efficacy: 92.3 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

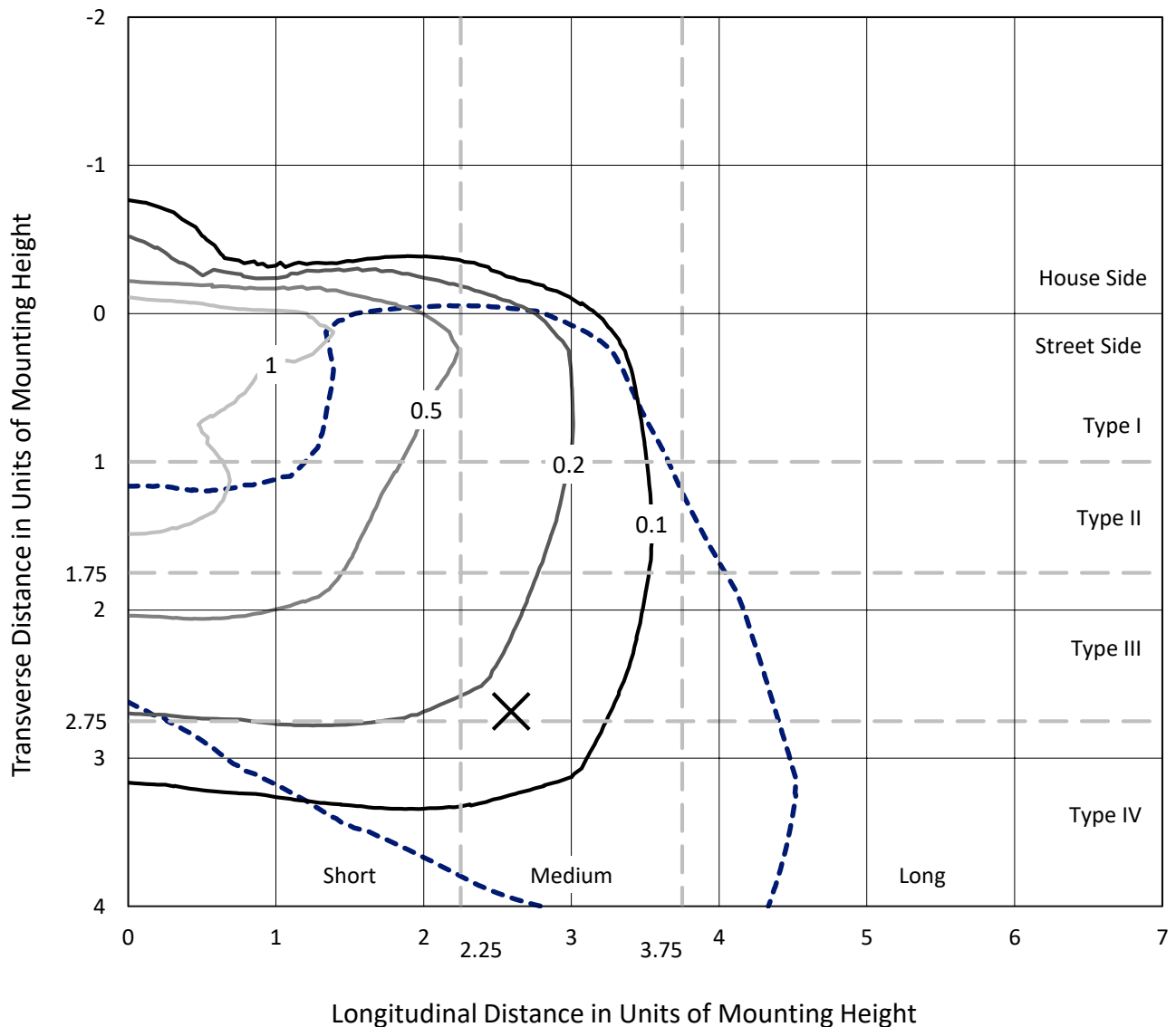
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398073
 CATALOG NUMBER: ARCH-S-PA1-80-750-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

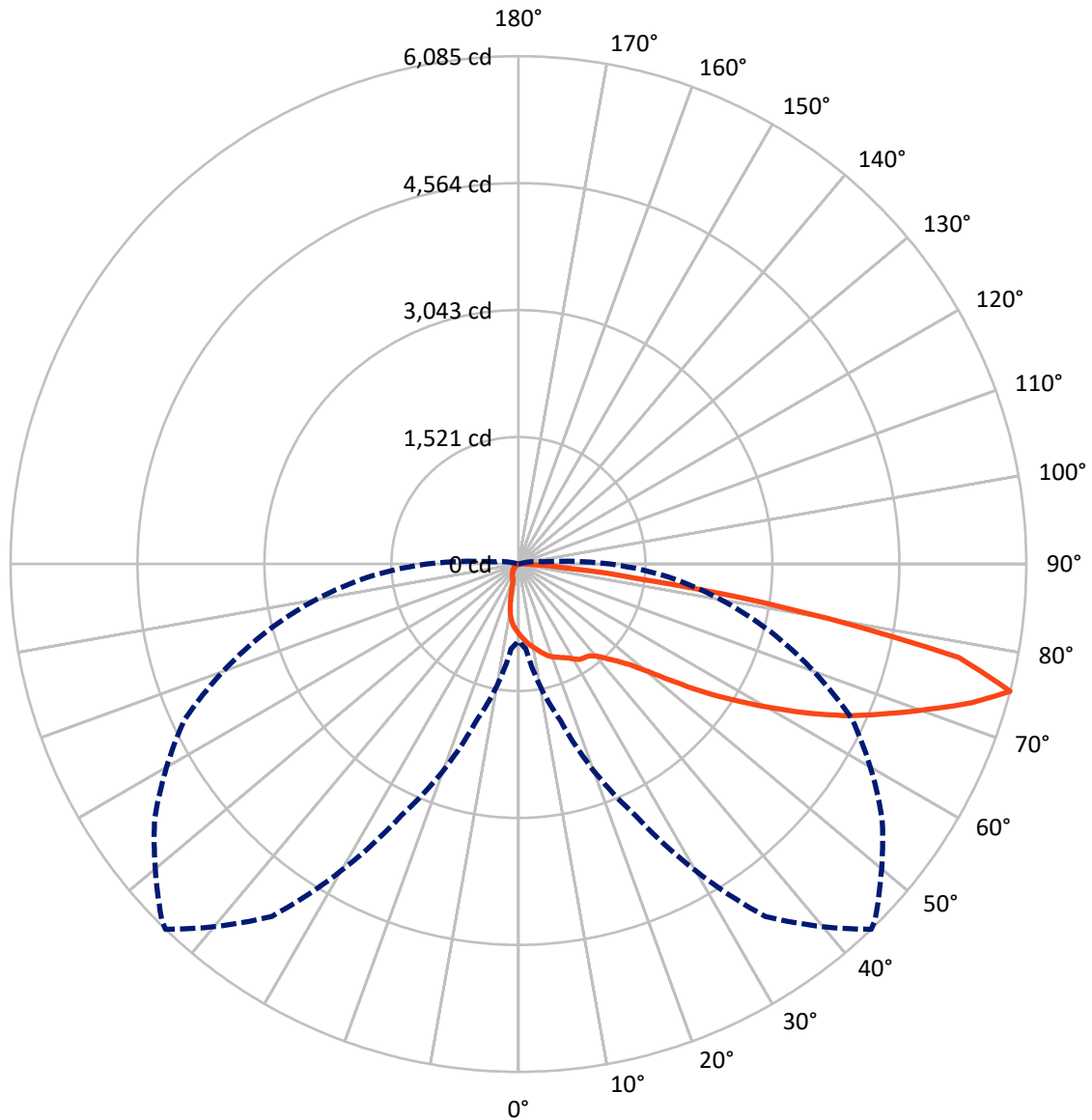
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P398073
CATALOG NUMBER: ARCH-S-PA1-80-750-U-T4W-HSS

Luminous Intensity Polar Plot



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



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CATALOG NUMBER: ARCH-S-PA1-80-750-U-T4W-HSS

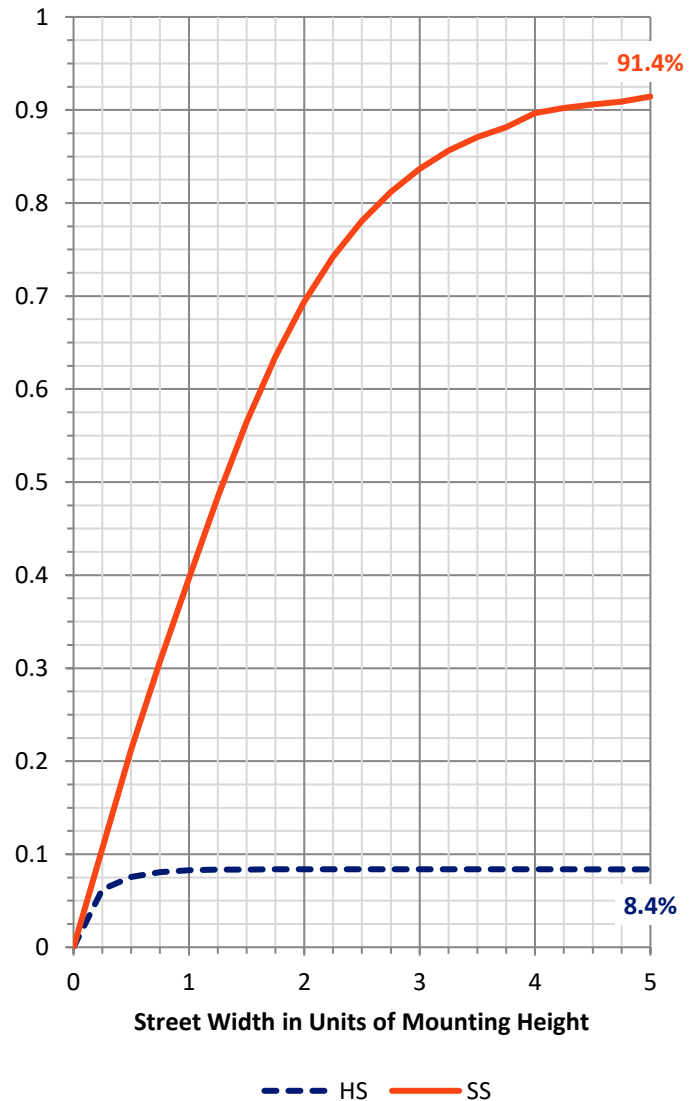
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	646.3	0.0	646.3
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	7017.7	0.0	7017.7
	% Fixture	91.6	0.0	91.6
Total	Lumens	7664.0	0.0	7664.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	1.0
10°-20°	220.4	2.9
20°-30°	363.8	4.7
30°-40°	528.0	6.9
40°-50°	858.3	11.2
50°-60°	1513.1	19.7
60°-70°	2174.7	28.4
70°-80°	1741.4	22.7
80°-90°	185.5	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°	7664.0	100.0
0°-180°	7664.0	100.0



REPORT NUMBER: P398073

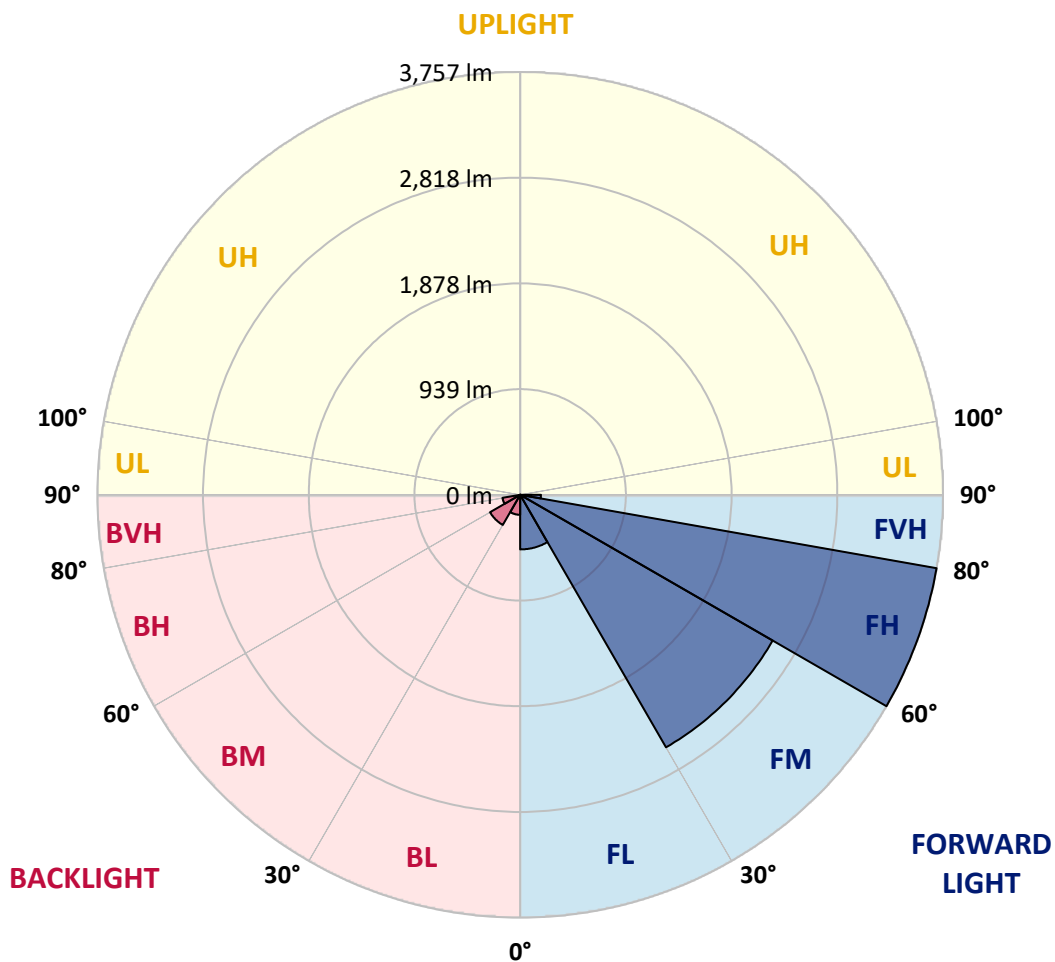
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	485.3	6.3			
FM	(30°-60°)	2590.5	33.8			
FH	(60°-80°)	3756.8	49.0			G2/5000
FVH	(80°-90°)	185.1	2.4			G2/225
BL	(0°-30°)	177.6	2.3	B1/500		
BM	(30°-60°)	309.0	4.0	B1/1000		
BH	(60°-80°)	159.3	2.1	B1/500		G1/500
BVH	(80°-90°)	0.5	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: P398073

CATALOG NUMBER: ARCH-S-PA1-80-750-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2
2.5°	909.1	907.7	903.5	896.4	889.3	882.3	880.9	869.5	856.8	846.9	838.4
5°	989.7	988.3	981.2	965.7	950.1	931.8	930.3	903.5	879.4	852.6	830.0
7.5°	1073.1	1070.3	1057.6	1033.6	1006.7	978.4	975.6	936.0	900.7	865.3	832.8
10°	1138.2	1135.4	1117.0	1088.7	1051.9	1016.6	1012.3	971.3	936.0	890.8	846.9
12.5°	1201.8	1196.2	1172.1	1141.0	1095.8	1061.8	1057.6	1015.2	972.8	926.1	872.4
15°	1261.2	1254.1	1231.5	1191.9	1143.8	1111.3	1108.5	1063.2	1019.4	965.7	906.3
17.5°	1302.2	1299.4	1272.5	1228.7	1182.0	1155.2	1152.3	1105.7	1061.8	1005.3	941.7
20°	1323.4	1323.4	1298.0	1249.9	1207.5	1189.1	1184.8	1141.0	1098.6	1044.9	978.4
22.5°	1327.6	1331.9	1312.1	1259.8	1228.7	1213.1	1210.3	1172.1	1131.1	1081.6	1019.4
25°	1336.1	1336.1	1326.2	1269.7	1247.1	1242.8	1241.4	1207.5	1170.7	1121.2	1060.4
27.5°	1346.0	1346.0	1339.0	1283.8	1275.3	1273.9	1272.5	1257.0	1227.3	1169.3	1108.5
30°	1371.5	1372.9	1367.2	1312.1	1306.4	1322.0	1324.8	1316.3	1279.6	1207.5	1158.0
32.5°	1435.1	1422.4	1406.8	1331.9	1341.8	1361.6	1363.0	1346.0	1306.4	1248.5	1217.4
35°	1594.9	1519.9	1449.2	1348.9	1353.1	1372.9	1375.7	1374.3	1350.3	1300.8	1285.2
37.5°	1743.3	1637.3	1536.9	1388.4	1374.3	1395.5	1401.2	1425.2	1406.8	1372.9	1377.1
40°	1829.6	1788.6	1717.9	1497.3	1416.7	1449.2	1454.9	1491.7	1484.6	1470.4	1497.3
42.5°	2095.4	2098.2	2021.9	1659.9	1494.5	1546.8	1553.9	1583.6	1593.5	1600.5	1665.6
45°	2403.6	2413.5	2395.1	1952.6	1641.5	1658.5	1668.4	1708.0	1744.7	1790.0	1908.8
47.5°	2774.1	2765.6	2697.7	2310.3	1897.4	1802.7	1809.8	1886.1	1949.8	2048.7	2218.4
50°	3102.1	3123.3	2994.6	2644.0	2258.0	2030.4	2023.3	2098.2	2212.7	2351.3	2564.8
52.5°	3432.9	3401.8	3227.9	2974.8	2685.0	2340.0	2318.8	2359.8	2521.0	2685.0	2904.1
55°	3520.6	3523.4	3464.0	3336.8	3041.3	2716.1	2680.7	2677.9	2878.7	2990.4	3260.4
57.5°	3693.1	3700.2	3714.3	3739.7	3599.8	3092.2	3055.4	3015.8	3211.0	3276.0	3618.2
60°	3868.4	3876.9	3963.1	4100.3	4007.0	3498.0	3458.4	3365.1	3473.9	3561.6	3994.2
62.5°	3845.8	3905.2	4155.4	4428.3	4417.0	3943.3	3893.9	3669.1	3738.3	3814.7	4339.2
65°	3472.5	3536.1	4098.9	4518.8	4828.4	4383.1	4302.5	3982.9	3987.2	4079.1	4671.5
67.5°	3138.8	3208.1	3745.4	4480.6	5099.9	4777.5	4694.1	4298.2	4231.8	4384.5	4849.7
70°	2946.6	3015.8	3464.0	4361.9	5176.3	5214.4	5142.3	4658.8	4523.0	4663.0	4650.3
72.5°	2306.1	2414.9	3104.9	4135.6	5258.3	5682.4	5625.9	5115.5	4770.5	4371.8	3540.4
75°	919.0	1019.4	1938.4	3328.3	5155.1	6085.4	6041.6	5320.5	4415.6	3121.9	1812.6
77.5°	277.1	296.9	538.7	1645.8	3779.3	5395.4	5381.3	4473.6	3124.7	1449.2	494.9
80°	91.9	101.8	165.4	453.9	1725.0	3370.7	3434.3	2850.4	1419.5	332.3	100.4
82.5°	38.2	42.4	83.4	182.4	610.8	1452.1	1430.9	1276.7	494.9	206.4	36.8
85°	9.9	12.7	38.2	104.6	223.4	500.5	526.0	428.4	280.0	171.1	11.3
87.5°	0.0	0.0	18.4	42.4	100.4	151.3	158.4	130.1	158.4	128.7	5.7
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: P398073

CATALOG NUMBER: ARCH-S-PA1-80-750-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2	834.2
2.5°	831.4	824.3	811.6	803.1	791.8	789.0	783.3	776.2	774.8	767.7	769.2
5°	817.2	805.9	783.3	767.7	749.4	743.7	733.8	726.7	721.1	711.2	712.6
7.5°	814.4	797.4	766.3	736.6	706.9	685.7	656.0	632.0	612.2	591.0	595.2
10°	824.3	803.1	759.3	718.3	664.5	596.7	518.9	468.0	442.5	417.1	419.9
12.5°	844.1	818.6	762.1	699.9	591.0	475.1	367.6	298.3	280.0	268.6	270.1
15°	873.8	842.7	770.6	664.5	492.0	343.6	244.6	214.9	222.0	226.2	226.2
17.5°	904.9	869.5	777.6	600.9	380.3	240.4	199.4	196.5	206.4	216.3	216.3
20°	943.1	897.8	779.1	520.3	274.3	195.1	188.0	188.0	195.1	206.4	206.4
22.5°	979.8	928.9	766.3	428.4	209.3	181.0	181.0	181.0	185.2	196.5	197.9
25°	1023.7	967.1	739.5	330.9	179.6	172.5	172.5	173.9	176.7	186.6	188.0
27.5°	1070.3	1006.7	694.2	241.8	164.0	162.6	164.0	165.4	166.8	176.7	179.6
30°	1124.0	1050.5	636.3	181.0	149.9	149.9	154.1	156.9	156.9	165.4	168.3
32.5°	1186.3	1108.5	567.0	149.9	135.7	134.3	141.4	145.6	145.6	152.7	155.5
35°	1264.0	1167.9	483.6	132.9	124.4	121.6	124.4	131.5	134.3	140.0	141.4
37.5°	1367.2	1238.6	394.5	123.0	115.9	110.3	110.3	111.7	117.4	123.0	124.4
40°	1498.7	1316.3	306.8	115.9	107.5	101.8	97.6	96.1	94.7	99.0	101.8
42.5°	1664.2	1404.0	229.1	108.9	100.4	91.9	86.2	80.6	73.5	72.1	73.5
45°	1876.2	1511.5	169.7	103.2	96.1	83.4	73.5	63.6	50.9	46.7	48.1
47.5°	2126.5	1623.2	132.9	97.6	93.3	73.5	60.8	43.8	31.1	28.3	29.7
50°	2392.3	1730.6	113.1	90.5	87.7	63.6	43.8	26.9	18.4	18.4	19.8
52.5°	2618.5	1791.4	103.2	84.8	79.2	52.3	28.3	15.6	11.3	11.3	12.7
55°	2837.7	1823.9	96.1	79.2	67.9	36.8	15.6	9.9	7.1	7.1	7.1
57.5°	3063.9	1838.1	87.7	72.1	53.7	22.6	8.5	5.7	4.2	4.2	4.2
60°	3264.7	1811.2	74.9	59.4	35.3	11.3	4.2	4.2	2.8	1.4	1.4
62.5°	3432.9	1760.3	52.3	42.4	21.2	5.7	2.8	1.4	0.0	0.0	0.0
65°	3536.1	1678.3	33.9	28.3	12.7	4.2	1.4	0.0	0.0	0.0	0.0
67.5°	3506.5	1524.2	21.2	18.4	5.7	2.8	1.4	0.0	0.0	0.0	0.0
70°	3164.3	1249.9	15.6	11.3	4.2	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	2280.6	845.5	11.3	7.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	1097.2	301.2	7.1	5.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	268.6	66.5	4.2	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	59.4	12.7	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.8	5.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	1.4	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)