

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: P398071

Luminaire Tested: **ARCH-S-PA1-80-750-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
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-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7806 lumens
Efficiency: N/A
Efficacy: 94.0 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 (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

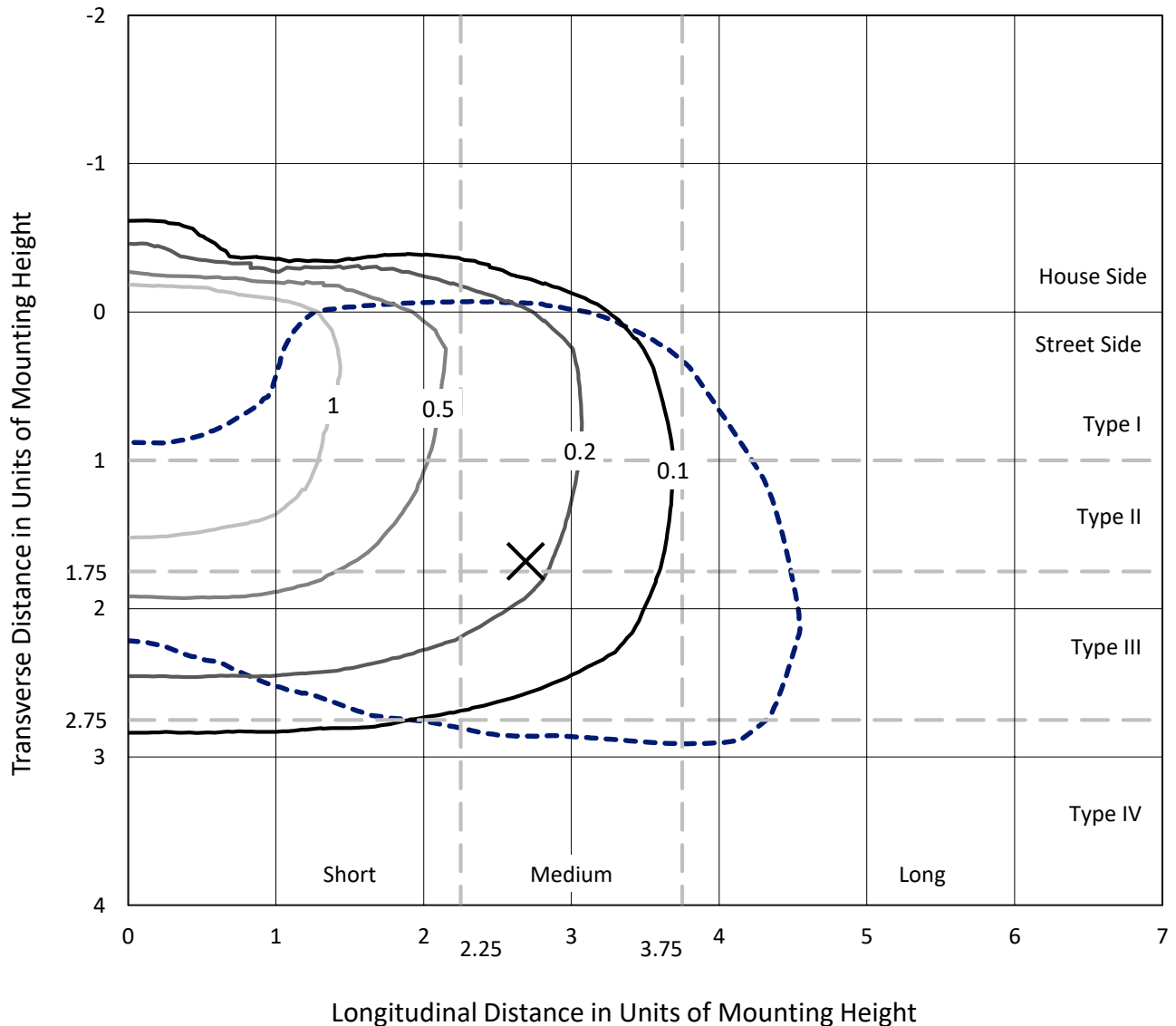


REPORT NUMBER: P398071

CATALOG NUMBER: ARCH-S-PA1-80-750-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

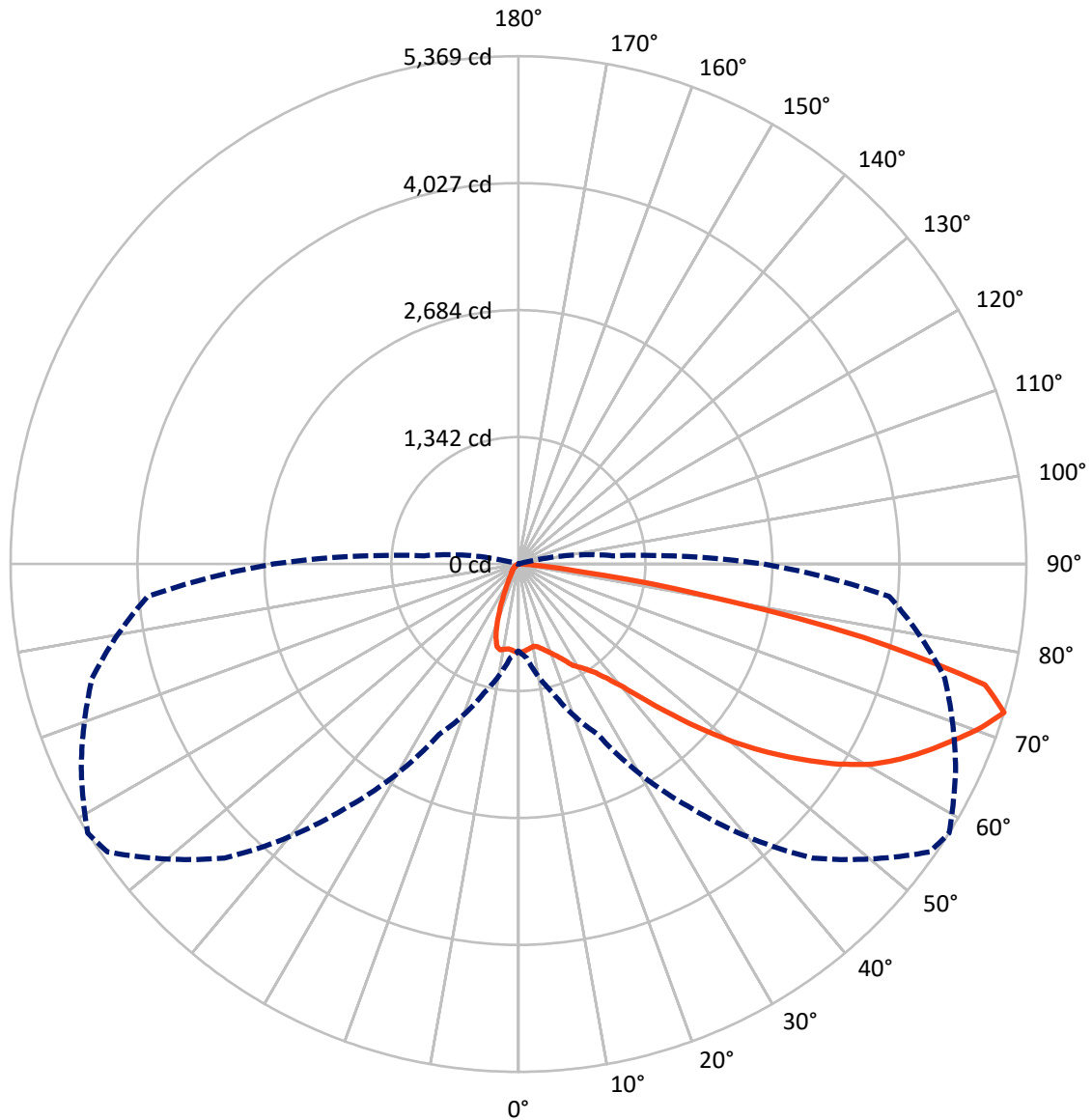


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P398071

CATALOG NUMBER: ARCH-S-PA1-80-750-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P398071

CATALOG NUMBER: ARCH-S-PA1-80-750-U-T3-HSS

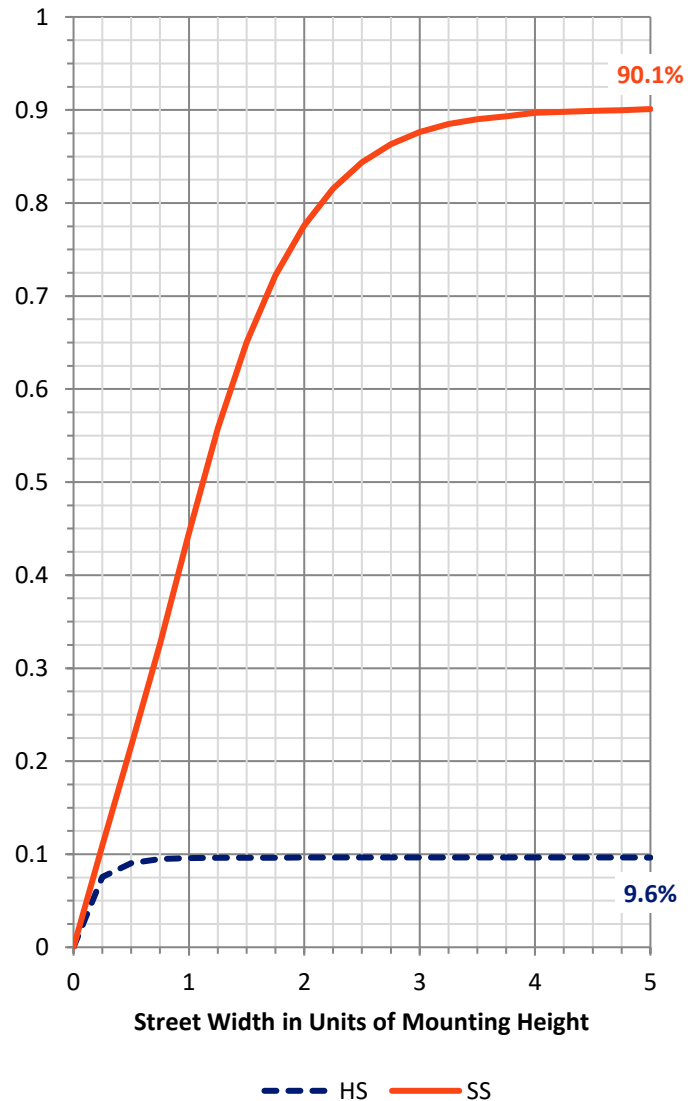
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	759.1	0.0	759.1
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	7046.9	0.0	7046.9
	% Fixture	90.3	0.0	90.3
Total	Lumens	7806.0	0.0	7806.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	1.1
10°-20°	223.9	2.9
20°-30°	351.7	4.5
30°-40°	606.6	7.8
40°-50°	1154.1	14.8
50°-60°	1827.7	23.4
60°-70°	2132.7	27.3
70°-80°	1335.7	17.1
80°-90°	87.7	1.1
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°	7806.0	100.0
0°-180°	7806.0	100.0



REPORT NUMBER: P398071

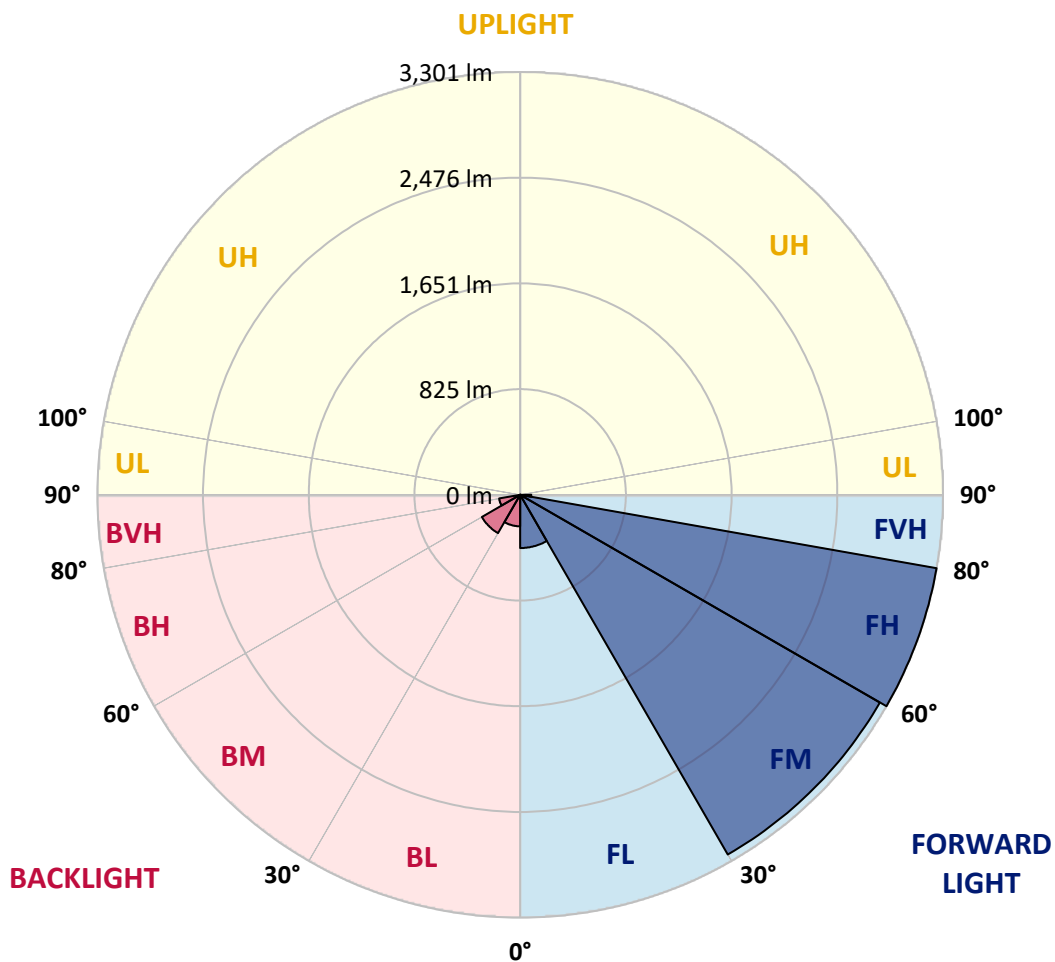
CATALOG NUMBER: ARCH-S-PA1-80-750-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	415.8	5.3			
FM	(30°-60°)	3242.9	41.5			
FH	(60°-80°)	3301.4	42.3			G2/5000
FVH	(80°-90°)	86.8	1.1			G1/100
BL	(0°-30°)	245.8	3.1	B1/500		
BM	(30°-60°)	345.4	4.4	B1/1000		
BH	(60°-80°)	167.0	2.1	B1/500		G1/500
BVH	(80°-90°)	0.8	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: P398071

CATALOG NUMBER: ARCH-S-PA1-80-750-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7
2.5°	932.5	928.3	926.9	925.5	926.9	928.3	924.1	928.3	925.5	926.9	929.7
5°	899.0	894.8	893.4	894.8	899.0	906.0	908.8	912.9	912.9	917.1	918.5
7.5°	861.3	858.5	857.1	859.9	868.3	883.6	892.0	897.6	903.2	911.5	919.9
10°	840.4	839.0	837.6	841.7	850.1	864.1	875.3	883.6	904.6	928.3	943.7
12.5°	826.4	826.4	829.2	837.6	848.7	859.9	886.4	897.6	929.7	966.0	986.9
15°	815.2	815.2	819.4	834.8	850.1	876.6	915.7	928.3	966.0	1010.7	1038.6
17.5°	806.9	809.6	812.4	827.8	857.1	901.8	947.8	966.0	1012.1	1060.9	1091.6
20°	808.2	811.0	812.4	827.8	869.7	931.1	989.7	1010.7	1063.7	1115.4	1146.1
22.5°	816.6	820.8	822.2	843.1	892.0	961.8	1037.2	1060.9	1118.1	1172.6	1196.3
25°	851.5	854.3	845.9	864.1	924.1	1009.3	1098.6	1123.7	1181.0	1231.2	1250.8
27.5°	970.2	973.0	926.9	906.0	949.2	1048.3	1174.0	1208.9	1280.1	1313.6	1316.4
30°	1227.0	1229.8	1139.1	1040.0	1009.3	1081.8	1215.9	1264.7	1356.8	1394.5	1377.8
32.5°	1557.9	1555.1	1430.8	1284.3	1151.6	1140.5	1275.9	1327.5	1428.0	1464.3	1451.8
35°	1890.1	1894.3	1788.2	1567.6	1377.8	1250.8	1352.7	1412.7	1534.1	1585.8	1563.4
37.5°	2117.6	2145.6	2099.5	1860.8	1655.6	1454.6	1476.9	1541.1	1693.3	1763.1	1715.6
40°	2438.7	2431.7	2320.0	2144.2	1962.7	1756.1	1677.9	1708.6	1883.1	1976.6	1902.7
42.5°	2870.0	2856.1	2666.2	2494.5	2292.1	2123.2	1964.1	1958.5	2100.9	2209.8	2102.3
45°	3260.9	3240.0	3110.1	2944.0	2722.1	2528.0	2313.1	2264.2	2363.3	2455.4	2329.8
47.5°	3572.2	3537.3	3445.2	3357.2	3302.8	3001.3	2678.8	2604.8	2655.1	2723.5	2546.2
50°	3940.7	3844.4	3710.4	3657.3	3770.4	3537.3	3030.6	2959.4	2956.6	2995.7	2769.5
52.5°	4108.2	3933.7	3858.4	3903.0	4102.7	4035.6	3410.3	3308.4	3267.9	3272.1	2977.5
55°	3905.8	3886.3	3926.8	4066.4	4327.4	4288.3	3774.6	3649.0	3588.9	3513.6	3177.1
57.5°	3675.5	3735.5	3896.1	4162.7	4612.2	4552.1	4133.4	3991.0	3880.7	3707.6	3399.1
60°	3463.3	3524.7	3790.0	4185.0	4768.5	4806.2	4432.1	4296.7	4133.4	3905.8	3643.4
62.5°	3140.9	3188.3	3561.0	4152.9	4700.1	4954.2	4640.1	4538.2	4386.0	4094.3	3924.0
65°	2777.9	2808.6	3177.1	3896.1	4566.1	4937.4	4811.8	4754.6	4606.6	4291.1	4201.8
67.5°	2380.1	2416.4	2723.5	3434.0	4303.7	4859.2	4973.7	4968.1	4799.2	4508.9	4402.8
70°	1922.2	1925.0	2179.1	2847.7	3845.8	4702.9	5174.7	5187.3	4983.5	4672.2	4411.2
72.5°	919.9	995.3	1412.7	1987.8	3125.5	4395.8	5305.9	5368.8	5099.4	4666.6	3935.1
75°	210.8	217.8	411.8	945.0	1832.9	3374.0	4977.9	5095.2	4817.4	4035.6	2772.3
77.5°	76.8	81.0	115.9	276.4	704.9	1743.5	3562.4	3734.1	3561.0	2609.0	1310.8
80°	51.6	50.3	60.0	122.8	323.9	494.2	1821.7	1923.6	1756.1	890.6	314.1
82.5°	26.5	27.9	41.9	68.4	217.8	171.7	608.6	661.7	544.4	178.7	58.6
85°	12.6	12.6	23.7	43.3	92.1	60.0	135.4	163.3	146.6	78.2	19.5
87.5°	12.6	12.6	22.3	27.9	47.5	25.1	33.5	41.9	39.1	41.9	7.0
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: P398071

CATALOG NUMBER: ARCH-S-PA1-80-750-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7	936.7
2.5°	929.7	928.3	926.9	929.7	928.3	931.1	931.1	933.9	933.9	931.1	929.7
5°	917.1	914.3	911.5	911.5	910.1	912.9	921.3	928.3	929.7	925.5	924.1
7.5°	918.5	918.5	915.7	910.1	900.4	900.4	900.4	908.8	912.9	910.1	908.8
10°	943.7	945.0	938.1	925.5	908.8	893.4	864.1	820.8	780.3	769.2	765.0
12.5°	986.9	988.3	974.4	952.0	917.1	826.4	714.7	611.4	531.9	509.5	505.3
15°	1038.6	1040.0	1014.8	978.6	872.5	661.7	495.6	378.3	308.5	291.8	290.4
17.5°	1091.6	1088.8	1051.1	981.3	739.8	469.0	301.5	241.5	223.3	219.2	220.6
20°	1143.3	1134.9	1083.2	929.7	569.5	307.1	220.6	206.6	202.4	199.6	199.6
22.5°	1190.7	1174.0	1109.8	827.8	399.2	220.6	196.8	194.0	188.5	184.3	182.9
25°	1238.2	1214.5	1126.5	695.2	268.0	192.6	185.7	180.1	173.1	167.5	166.1
27.5°	1295.4	1261.9	1118.1	527.7	201.0	178.7	173.1	164.7	154.9	146.6	143.8
30°	1349.9	1312.2	1070.7	364.3	171.7	164.7	156.3	143.8	131.2	121.4	118.7
32.5°	1418.3	1375.0	985.5	238.7	149.4	143.8	135.4	120.1	103.3	92.1	89.3
35°	1516.0	1467.1	876.6	167.5	131.2	121.4	110.3	93.5	75.4	67.0	65.6
37.5°	1652.8	1587.2	739.8	135.4	115.9	101.9	85.2	68.4	55.8	48.9	47.5
40°	1820.3	1719.8	587.7	120.1	103.3	85.2	64.2	48.9	40.5	34.9	34.9
42.5°	2001.8	1844.0	432.7	110.3	90.7	69.8	47.5	34.9	29.3	26.5	25.1
45°	2188.8	1954.3	291.8	101.9	79.6	53.0	33.5	23.7	19.5	19.5	18.1
47.5°	2382.9	2028.3	188.5	92.1	67.0	39.1	22.3	16.8	14.0	14.0	14.0
50°	2575.5	2067.4	134.0	83.8	54.4	26.5	16.8	12.6	11.2	11.2	11.2
52.5°	2715.1	2042.3	107.5	72.6	41.9	19.5	12.6	9.8	8.4	8.4	8.4
55°	2836.5	1999.0	93.5	62.8	30.7	14.0	9.8	8.4	7.0	7.0	7.0
57.5°	2960.8	1943.1	83.8	53.0	22.3	9.8	7.0	5.6	5.6	5.6	5.6
60°	3073.8	1848.2	72.6	41.9	15.4	7.0	5.6	4.2	4.2	4.2	4.2
62.5°	3184.1	1767.3	62.8	32.1	11.2	5.6	2.8	2.8	1.4	1.4	1.4
65°	3246.9	1658.4	50.3	20.9	7.0	4.2	1.4	1.4	0.0	0.0	0.0
67.5°	3227.4	1528.5	34.9	12.6	4.2	2.8	1.4	0.0	0.0	0.0	0.0
70°	3092.0	1354.1	20.9	7.0	4.2	2.8	1.4	0.0	0.0	0.0	0.0
72.5°	2589.5	1002.3	12.6	5.6	2.8	1.4	0.0	0.0	0.0	0.0	0.0
75°	1729.6	460.7	7.0	4.2	1.4	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	791.5	138.2	4.2	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	159.1	36.3	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.5	7.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	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)