

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: P398096

Luminaire Tested: **ARCH-S-PA1-80-830-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398096
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-80-830-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5900 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

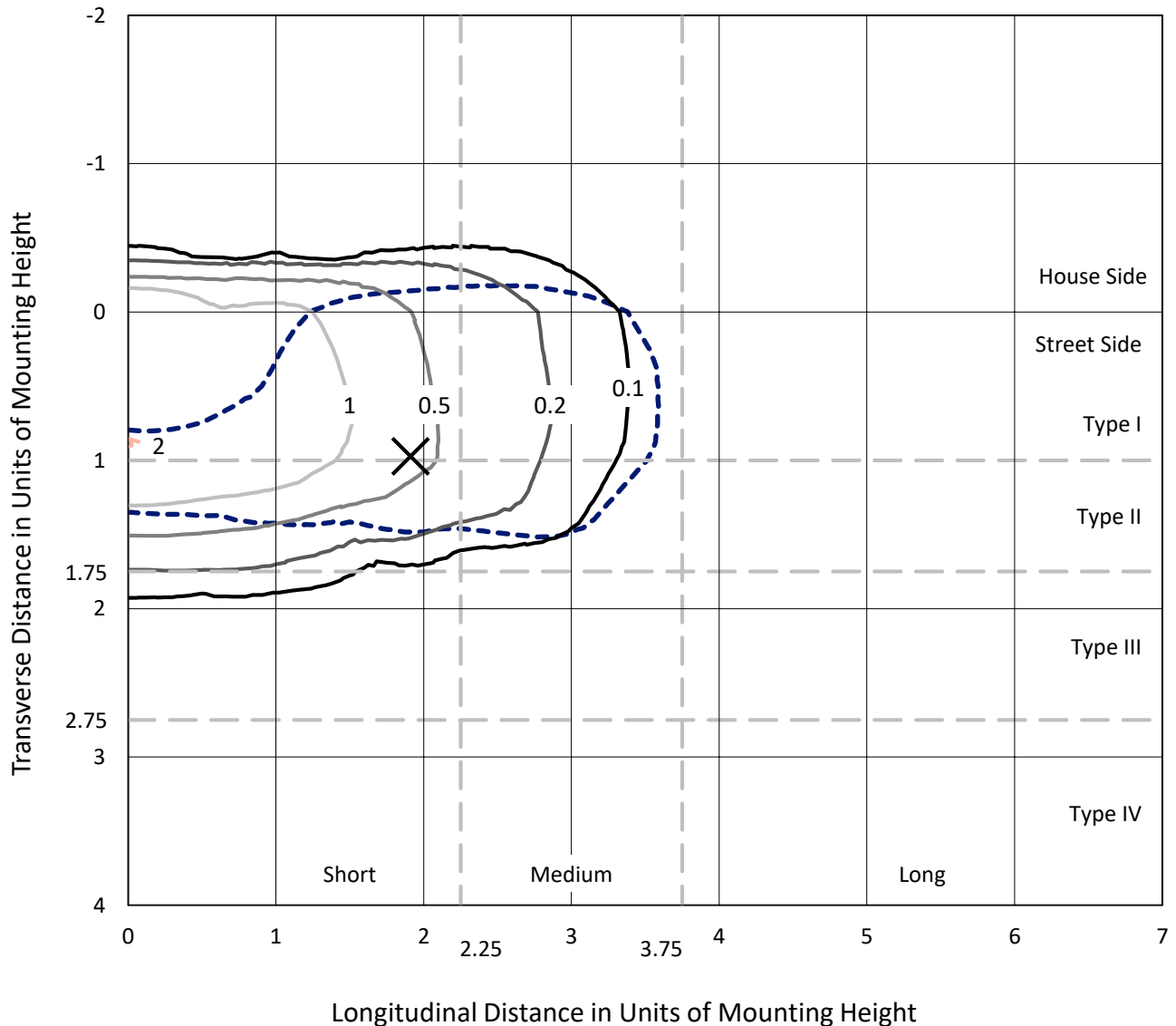
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

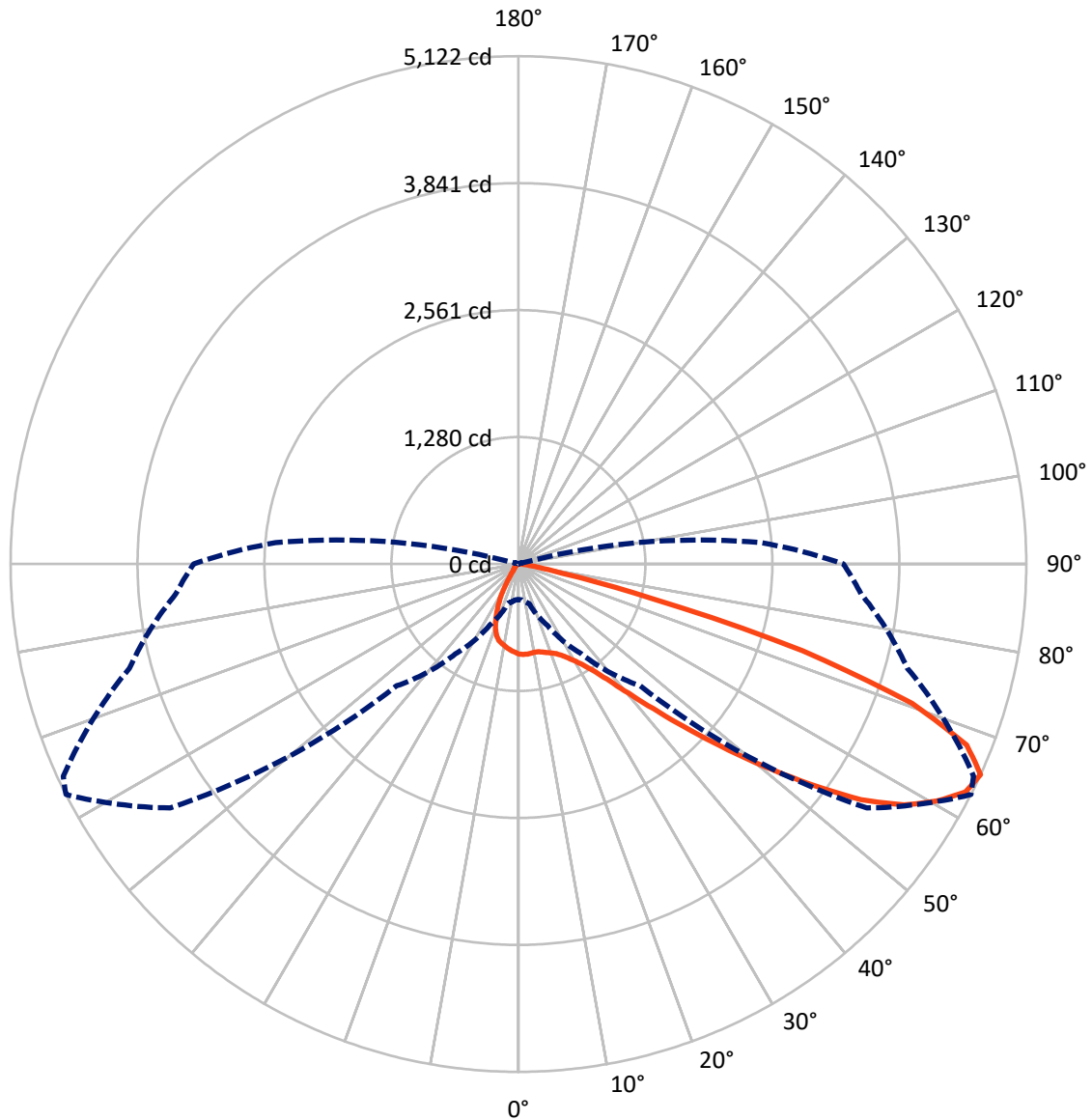
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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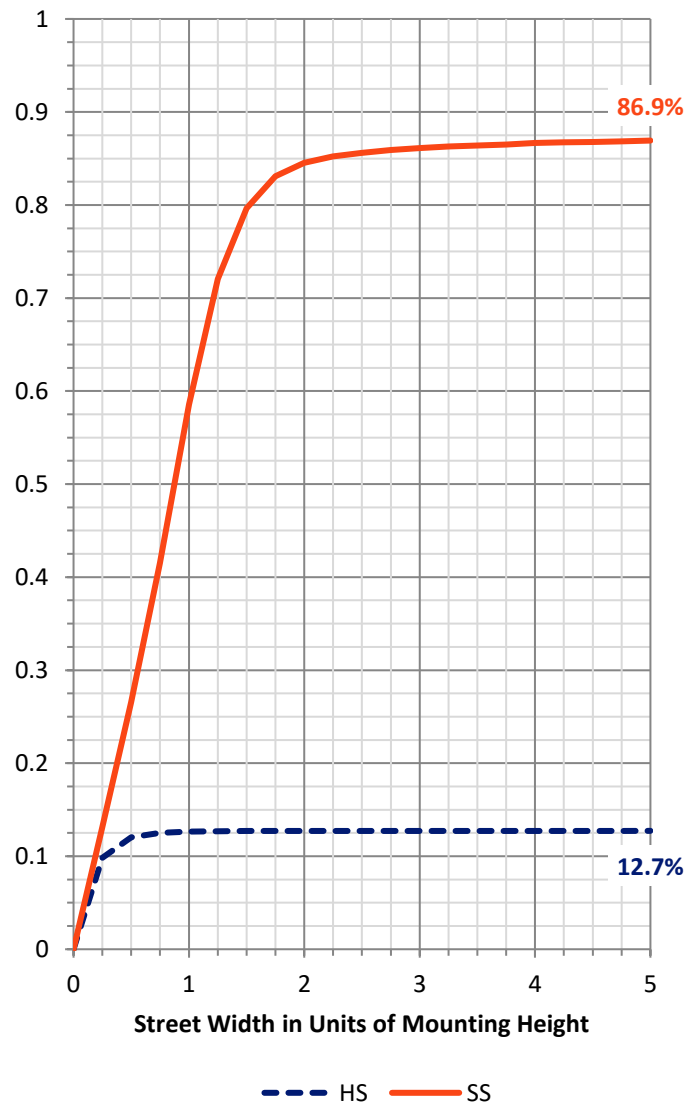
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	759.3	0.0	759.3
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5140.7	0.0	5140.7
	% Fixture	87.1	0.0	87.1
Total	Lumens	5900.0	0.0	5900.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.4
10°-20°	204.6	3.5
20°-30°	303.2	5.1
30°-40°	563.0	9.5
40°-50°	1192.8	20.2
50°-60°	1649.3	28.0
60°-70°	1320.3	22.4
70°-80°	548.6	9.3
80°-90°	35.2	0.6
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°	5900.0	100.0
0°-180°	5900.0	100.0



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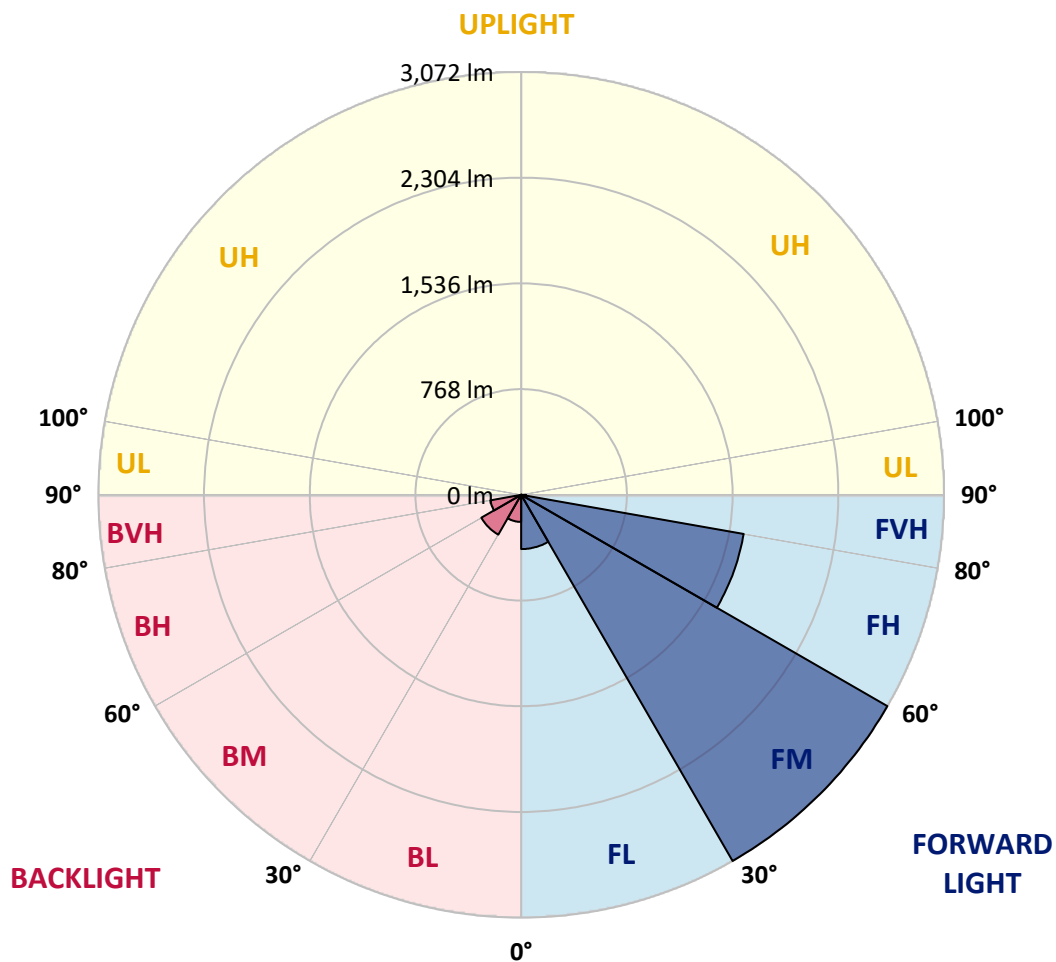
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	394.0	6.7			
FM	(30°-60°)	3071.6	52.1			
FH	(60°-80°)	1641.5	27.8			G1/1800
FVH	(80°-90°)	33.6	0.6			G1/100
BL	(0°-30°)	196.8	3.3	B1/500		
BM	(30°-60°)	333.6	5.7	B1/1000		
BH	(60°-80°)	227.4	3.9	B1/500		G1/500
BVH	(80°-90°)	1.6	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9
2.5°	924.5	922.3	920.0	918.9	918.9	917.8	913.4	912.2	910.0	907.8	905.6
5°	915.6	912.2	911.1	912.2	913.4	915.6	913.4	913.4	911.1	908.9	904.4
7.5°	893.3	891.1	892.2	895.5	896.6	904.4	905.6	908.9	908.9	906.7	903.3
10°	866.6	865.5	865.5	871.0	876.6	887.7	895.5	904.4	905.6	905.6	900.0
12.5°	846.5	845.4	848.8	855.4	866.6	881.1	894.4	907.8	910.0	911.1	902.2
15°	834.3	834.3	838.7	852.1	867.7	887.7	903.3	921.2	923.4	922.3	910.0
17.5°	823.1	824.2	833.2	855.4	873.3	900.0	918.9	939.0	940.1	939.0	918.9
20°	818.7	820.9	834.3	863.2	883.3	913.4	937.9	957.9	959.0	954.6	927.8
22.5°	830.9	832.0	848.8	879.9	898.9	932.3	963.5	982.4	983.5	976.8	941.2
25°	873.3	873.3	887.7	914.5	931.2	964.6	998.0	1020.3	1020.3	1012.5	971.3
27.5°	972.4	963.5	960.1	967.9	973.5	1009.1	1044.8	1072.6	1071.5	1060.4	1010.3
30°	1164.0	1141.7	1106.0	1066.0	1045.9	1070.4	1103.8	1139.5	1138.4	1120.5	1058.2
32.5°	1485.9	1453.6	1368.9	1263.1	1177.3	1149.5	1180.7	1219.7	1220.8	1199.6	1135.0
35°	1937.0	1885.7	1734.3	1587.2	1391.2	1285.4	1294.3	1336.6	1350.0	1338.8	1264.2
37.5°	2371.4	2324.6	2179.8	1976.0	1709.8	1493.7	1455.8	1492.6	1508.1	1508.1	1429.1
40°	2809.1	2754.5	2626.4	2421.5	2140.8	1818.9	1683.0	1713.1	1729.8	1733.1	1629.6
42.5°	3160.0	3124.3	3026.3	2867.0	2604.2	2389.2	2010.5	1993.8	2009.4	1997.1	1862.4
45°	3402.8	3375.0	3307.0	3246.9	3118.8	3010.7	2448.2	2335.7	2345.8	2303.4	2124.1
47.5°	3452.9	3421.7	3407.3	3490.8	3582.1	3608.9	2986.2	2742.3	2732.3	2638.7	2395.9
50°	3234.6	3237.9	3291.4	3529.8	3910.7	4151.3	3610.0	3201.2	3164.4	2956.1	2648.7
52.5°	2763.5	2816.9	2951.7	3338.2	4011.0	4545.6	4233.7	3687.9	3631.1	3264.7	2838.1
55°	2162.0	2231.0	2452.7	2897.1	3801.6	4721.6	4759.5	4193.6	4064.4	3496.4	2985.1
57.5°	1607.3	1628.4	1886.9	2292.3	3305.9	4548.9	5029.0	4583.5	4417.5	3681.3	3131.0
60°	1001.3	1014.7	1287.6	1745.4	2503.9	3910.7	5029.0	4851.9	4693.7	3847.2	3264.7
62.5°	622.6	627.1	729.6	1196.3	1702.0	2900.5	4820.7	5060.2	4933.2	3966.4	3379.4
65°	358.7	363.1	411.0	676.1	1107.2	1736.5	4288.3	5121.5	5064.7	4061.1	3468.5
67.5°	261.8	264.0	282.9	379.8	724.0	892.2	3221.2	4875.3	4946.6	4107.9	3466.3
70°	227.2	230.6	255.1	296.3	522.4	548.0	1639.6	4210.3	4409.7	4041.0	3362.7
72.5°	174.9	179.3	216.1	278.5	383.2	394.3	593.7	2996.2	3298.1	3623.3	3078.7
75°	120.3	124.8	161.5	229.5	316.3	295.2	326.4	1378.9	1739.8	2430.4	2343.5
77.5°	76.9	78.0	101.4	167.1	272.9	209.4	223.9	450.0	631.6	1099.4	1106.0
80°	51.2	52.4	62.4	108.0	187.1	193.8	138.1	208.3	228.3	320.8	222.8
82.5°	31.2	31.2	42.3	67.9	113.6	160.4	90.2	109.2	117.0	123.6	57.9
85°	12.3	12.3	25.6	44.6	71.3	74.6	56.8	63.5	66.8	72.4	26.7
87.5°	3.3	3.3	14.5	24.5	31.2	34.5	34.5	31.2	33.4	41.2	13.4
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°	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9	908.9
2.5°	904.4	901.1	896.6	892.2	887.7	884.4	881.1	881.1	878.8	875.5	873.3
5°	902.2	896.6	886.6	878.8	866.6	857.7	851.0	845.4	842.1	834.3	833.2
7.5°	898.9	892.2	877.7	862.1	842.1	826.5	810.9	799.7	788.6	779.7	777.5
10°	893.3	885.5	864.3	842.1	814.2	785.3	748.5	706.2	667.2	644.9	638.2
12.5°	893.3	883.3	855.4	825.4	785.3	714.0	620.4	526.8	454.4	422.1	413.2
15°	898.9	885.5	848.8	807.5	732.9	588.1	436.6	313.0	233.9	209.4	203.8
17.5°	904.4	885.5	838.7	783.0	637.1	426.6	248.4	164.8	139.2	133.7	133.7
20°	906.7	883.3	825.4	737.4	509.0	265.1	148.1	123.6	113.6	110.3	110.3
22.5°	915.6	884.4	815.3	671.6	369.8	155.9	117.0	103.6	93.6	90.2	90.2
25°	937.9	897.8	817.6	588.1	237.2	118.1	99.1	85.8	75.7	71.3	71.3
27.5°	973.5	927.8	829.8	491.2	149.3	101.4	83.5	69.1	61.3	56.8	56.8
30°	1013.6	961.2	835.4	379.8	111.4	85.8	67.9	54.6	49.0	45.7	44.6
32.5°	1083.8	1019.2	830.9	260.6	91.3	72.4	54.6	43.4	39.0	37.9	37.9
35°	1196.3	1120.5	822.0	163.7	75.7	57.9	43.4	35.6	32.3	31.2	30.1
37.5°	1348.9	1268.7	795.3	108.0	62.4	45.7	35.6	30.1	26.7	25.6	25.6
40°	1534.9	1438.0	744.0	82.4	53.5	36.8	30.1	25.6	23.4	22.3	22.3
42.5°	1747.6	1626.2	662.7	71.3	44.6	31.2	25.6	21.2	20.0	18.9	18.9
45°	1980.4	1823.4	550.2	63.5	37.9	25.6	21.2	18.9	16.7	16.7	15.6
47.5°	2227.7	2021.6	423.3	55.7	32.3	22.3	18.9	15.6	14.5	13.4	13.4
50°	2466.1	2198.7	297.4	47.9	26.7	18.9	15.6	13.4	12.3	11.1	11.1
52.5°	2634.2	2305.7	210.5	41.2	22.3	16.7	12.3	10.0	8.9	8.9	8.9
55°	2769.0	2372.5	147.0	34.5	18.9	14.5	10.0	7.8	7.8	6.7	6.7
57.5°	2896.0	2415.9	108.0	29.0	15.6	11.1	7.8	5.6	5.6	4.5	4.5
60°	3027.4	2439.3	82.4	23.4	13.4	8.9	5.6	4.5	3.3	3.3	3.3
62.5°	3160.0	2453.8	63.5	18.9	11.1	6.7	4.5	3.3	2.2	1.1	1.1
65°	3275.8	2458.3	49.0	14.5	8.9	4.5	3.3	1.1	0.0	0.0	0.0
67.5°	3310.3	2407.0	37.9	11.1	6.7	3.3	2.2	0.0	0.0	0.0	0.0
70°	3216.8	2271.1	29.0	8.9	5.6	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2854.8	1904.7	22.3	5.6	4.5	2.2	1.1	0.0	0.0	0.0	0.0
75°	2042.8	1015.8	15.6	4.5	3.3	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	940.1	393.2	11.1	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
80°	183.8	98.0	4.5	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.3	16.7	2.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.5	5.6	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	2.2	1.1	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)