

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: P398170

Luminaire Tested: **ARCH-S-PA1-90-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398170
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-PA1-90-830-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1180mA 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: 6649 lumens
Efficiency: N/A
Efficacy: 70.7 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

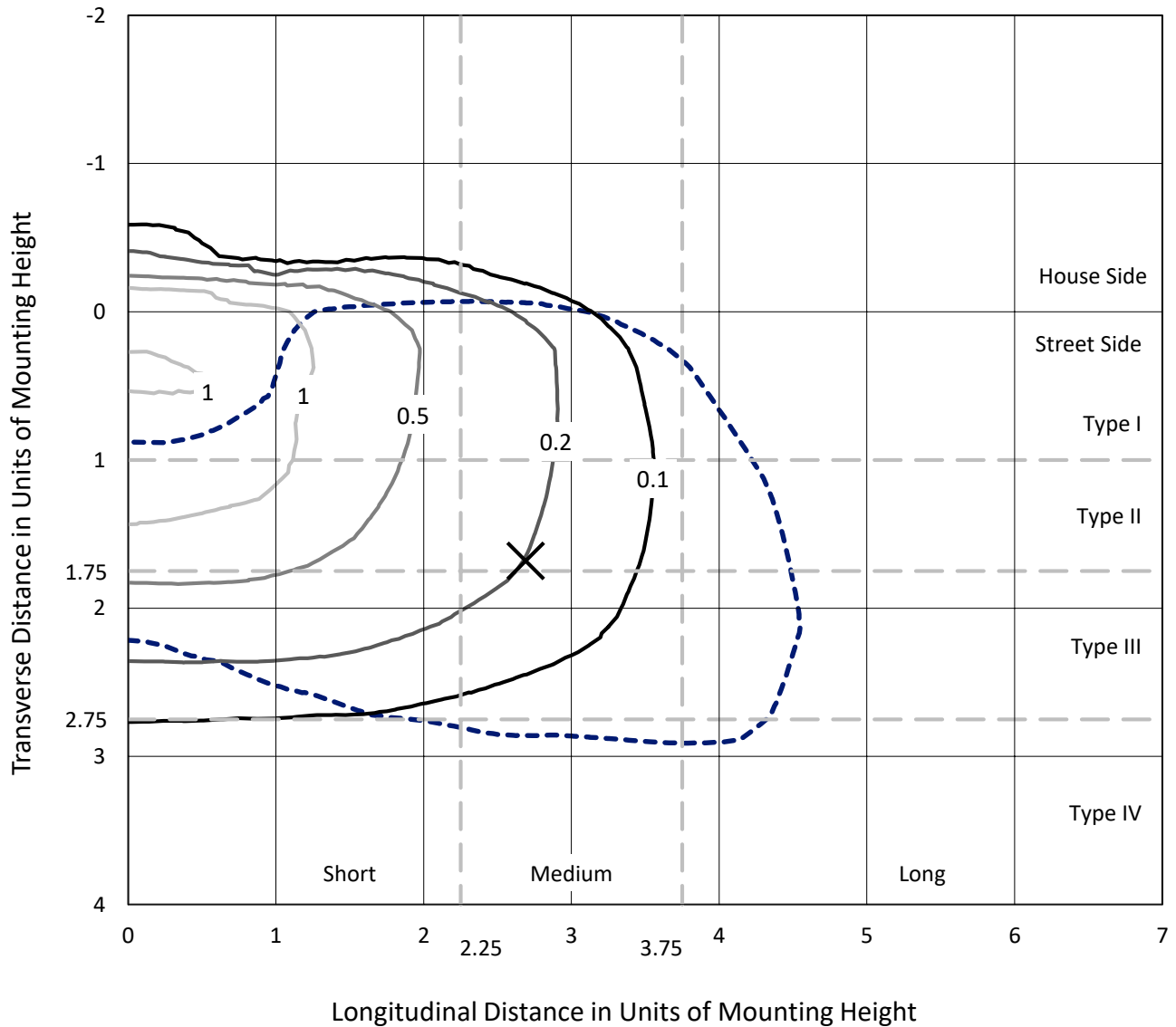
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

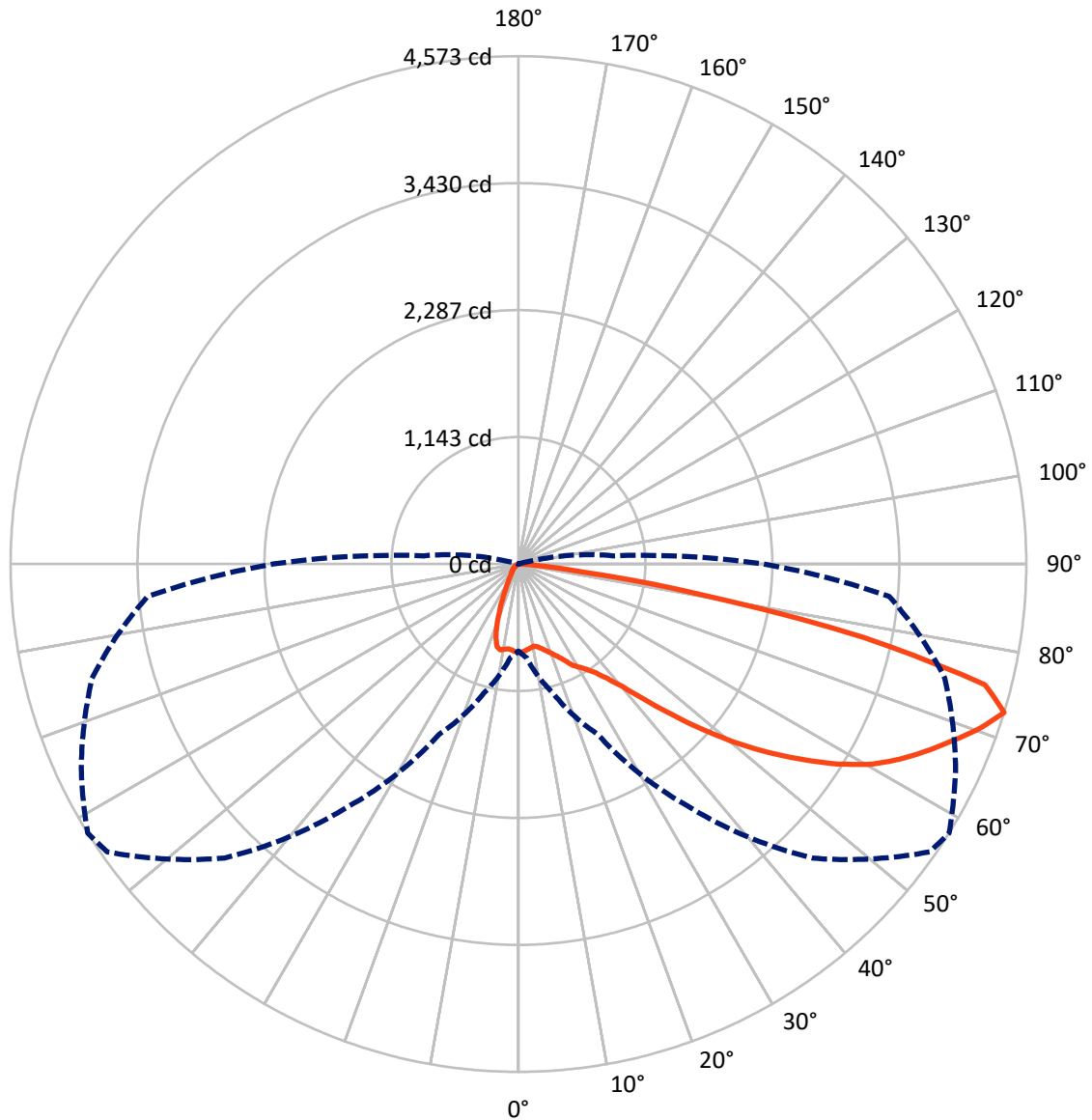


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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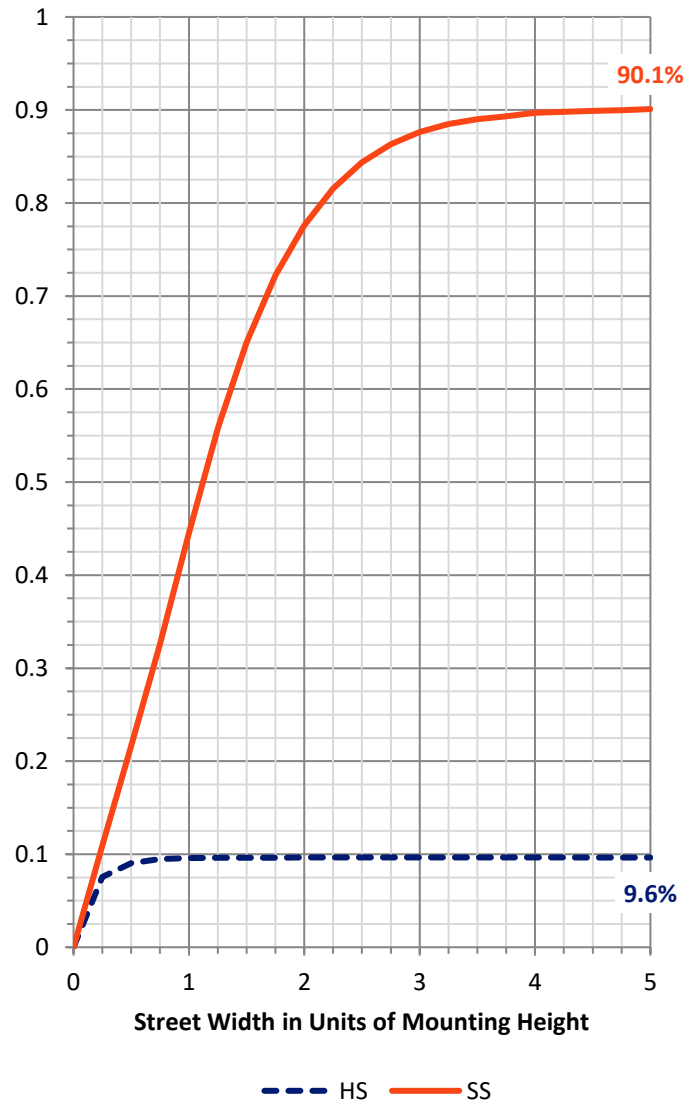
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	646.6	0.0	646.6
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	6002.4	0.0	6002.4
	% Fixture	90.3	0.0	90.3
Total	Lumens	6649.0	0.0	6649.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.2	1.1
10°-20°	190.7	2.9
20°-30°	299.6	4.5
30°-40°	516.7	7.8
40°-50°	983.0	14.8
50°-60°	1556.8	23.4
60°-70°	1816.6	27.3
70°-80°	1137.7	17.1
80°-90°	74.7	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°	6649.0	100.0
0°-180°	6649.0	100.0



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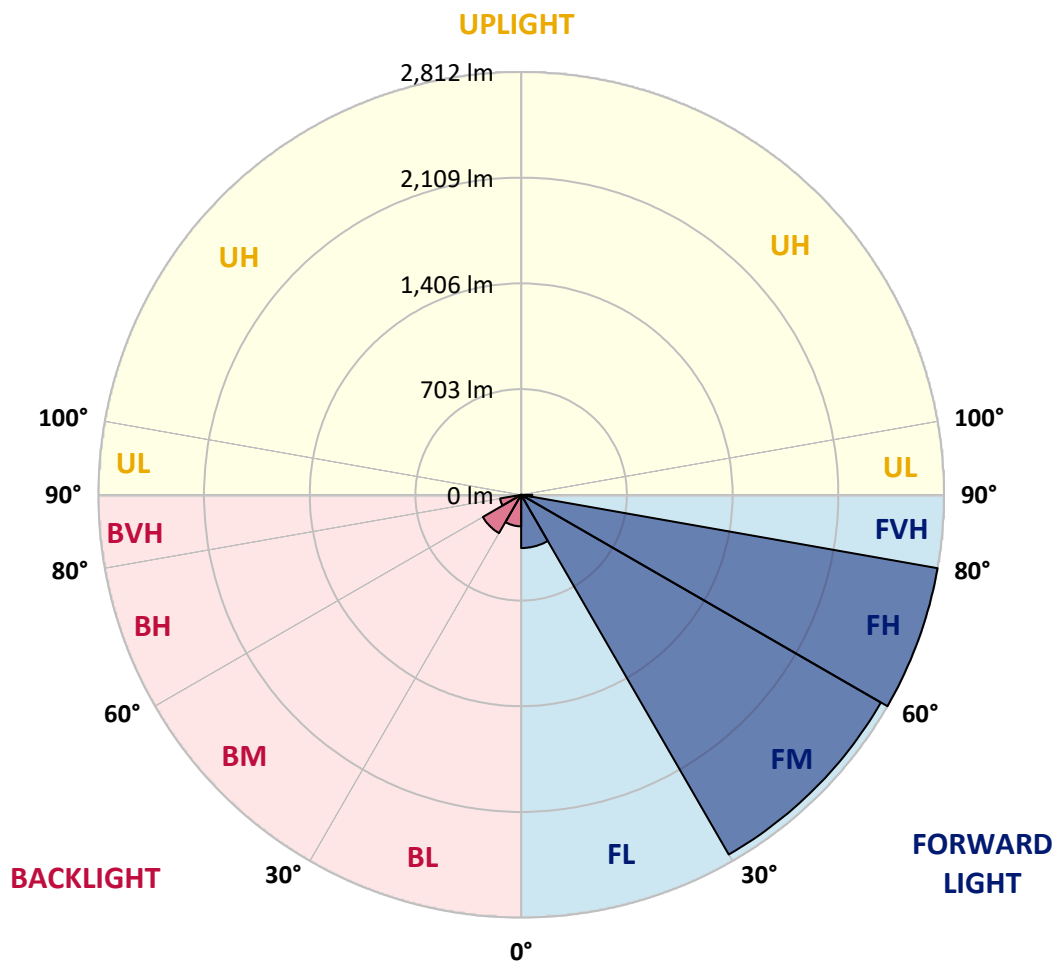
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	354.1	5.3			
FM	(30°-60°)	2762.3	41.5			
FH	(60°-80°)	2812.1	42.3			G2/5000
FVH	(80°-90°)	74.0	1.1			G1/100
BL	(0°-30°)	209.4	3.1	B1/500		
BM	(30°-60°)	294.2	4.4	B1/1000		
BH	(60°-80°)	142.3	2.1	B1/500		G1/500
BVH	(80°-90°)	0.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8
2.5°	794.3	790.7	789.5	788.3	789.5	790.7	787.1	790.7	788.3	789.5	791.9
5°	765.7	762.2	761.0	762.2	765.7	771.7	774.1	777.6	777.6	781.2	782.4
7.5°	733.6	731.3	730.1	732.4	739.6	752.7	759.8	764.5	769.3	776.4	783.6
10°	715.8	714.6	713.4	717.0	724.1	736.0	745.5	752.7	770.5	790.7	803.8
12.5°	703.9	703.9	706.3	713.4	722.9	732.4	755.0	764.5	791.9	822.8	840.6
15°	694.4	694.4	698.0	711.0	724.1	746.7	780.0	790.7	822.8	860.9	884.6
17.5°	687.3	689.6	692.0	705.1	730.1	768.1	807.4	822.8	862.0	903.7	929.8
20°	688.4	690.8	692.0	705.1	740.8	793.1	843.0	860.9	906.0	950.0	976.2
22.5°	695.6	699.1	700.3	718.2	759.8	819.2	883.4	903.7	952.4	998.8	1019.0
25°	725.3	727.7	720.6	736.0	787.1	859.7	935.8	957.2	1005.9	1048.7	1065.4
27.5°	826.4	828.8	789.5	771.7	808.5	893.0	1000.0	1029.7	1090.3	1118.9	1121.3
30°	1045.2	1047.5	970.2	885.8	859.7	921.5	1035.6	1077.3	1155.7	1187.8	1173.6
32.5°	1327.0	1324.6	1218.8	1093.9	981.0	971.4	1086.8	1130.8	1216.4	1247.3	1236.6
35°	1609.9	1613.5	1523.1	1335.3	1173.6	1065.4	1152.2	1203.3	1306.7	1350.7	1331.7
37.5°	1803.8	1827.5	1788.3	1585.0	1410.2	1239.0	1258.0	1312.7	1442.3	1501.7	1461.3
40°	2077.2	2071.3	1976.2	1826.4	1671.8	1495.8	1429.2	1455.4	1604.0	1683.7	1620.6
42.5°	2444.6	2432.8	2271.0	2124.8	1952.4	1808.5	1673.0	1668.2	1789.5	1882.2	1790.7
45°	2777.6	2759.7	2649.2	2507.7	2318.6	2153.3	1970.2	1928.6	2013.0	2091.5	1984.5
47.5°	3042.7	3013.0	2934.5	2859.6	2813.2	2556.4	2281.7	2218.7	2261.5	2319.8	2168.8
50°	3356.6	3274.6	3160.4	3115.3	3211.6	3013.0	2581.4	2520.7	2518.4	2551.7	2359.0
52.5°	3499.3	3350.7	3286.5	3324.5	3494.6	3437.5	2904.8	2818.0	2783.5	2787.1	2536.2
55°	3326.9	3310.3	3344.7	3463.6	3686.0	3652.7	3215.1	3108.1	3057.0	2992.8	2706.2
57.5°	3130.7	3181.8	3318.6	3545.7	3928.6	3877.4	3520.7	3399.4	3305.5	3158.1	2895.3
60°	2950.0	3002.3	3228.2	3564.7	4061.7	4093.8	3775.2	3659.8	3520.7	3326.9	3103.4
62.5°	2675.3	2715.7	3033.2	3537.4	4003.5	4219.9	3952.3	3865.5	3735.9	3487.4	3342.4
65°	2366.2	2392.3	2706.2	3318.6	3889.3	4205.6	4098.6	4049.8	3923.8	3655.1	3579.0
67.5°	2027.3	2058.2	2319.8	2925.0	3665.8	4139.0	4236.5	4231.8	4087.9	3840.6	3750.2
70°	1637.3	1639.7	1856.1	2425.6	3275.8	4005.8	4407.7	4418.4	4244.8	3979.7	3757.3
72.5°	783.6	847.8	1203.3	1693.2	2662.2	3744.3	4519.5	4573.0	4343.5	3974.9	3351.9
75°	179.5	185.5	350.8	805.0	1561.2	2873.9	4240.1	4340.0	4103.3	3437.5	2361.4
77.5°	65.4	69.0	98.7	235.4	600.5	1485.1	3034.4	3180.7	3033.2	2222.3	1116.5
80°	44.0	42.8	51.1	104.6	275.9	420.9	1551.7	1638.5	1495.8	758.6	267.5
82.5°	22.6	23.8	35.7	58.3	185.5	146.3	518.4	563.6	463.7	152.2	49.9
85°	10.7	10.7	20.2	36.9	78.5	51.1	115.3	139.1	124.8	66.6	16.6
87.5°	10.7	10.7	19.0	23.8	40.4	21.4	28.5	35.7	33.3	35.7	5.9
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°	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8	797.8
2.5°	791.9	790.7	789.5	791.9	790.7	793.1	793.1	795.5	795.5	793.1	791.9
5°	781.2	778.8	776.4	776.4	775.2	777.6	784.8	790.7	791.9	788.3	787.1
7.5°	782.4	782.4	780.0	775.2	766.9	766.9	766.9	774.1	777.6	775.2	774.1
10°	803.8	805.0	799.0	788.3	774.1	761.0	736.0	699.1	664.7	655.2	651.6
12.5°	840.6	841.8	829.9	810.9	781.2	703.9	608.8	520.8	453.0	434.0	430.4
15°	884.6	885.8	864.4	833.5	743.1	563.6	422.1	322.2	262.8	248.5	247.3
17.5°	929.8	927.4	895.3	835.9	630.2	399.5	256.8	205.7	190.2	186.7	187.9
20°	973.8	966.7	922.7	791.9	485.1	261.6	187.9	176.0	172.4	170.0	170.0
22.5°	1014.2	1000.0	945.3	705.1	340.1	187.9	167.7	165.3	160.5	157.0	155.8
25°	1054.7	1034.5	959.5	592.1	228.3	164.1	158.1	153.4	147.4	142.7	141.5
27.5°	1103.4	1074.9	952.4	449.5	171.2	152.2	147.4	140.3	132.0	124.8	122.5
30°	1149.8	1117.7	912.0	310.3	146.3	140.3	133.2	122.5	111.8	103.4	101.1
32.5°	1208.1	1171.2	839.5	203.3	127.2	122.5	115.3	102.3	88.0	78.5	76.1
35°	1291.3	1249.7	746.7	142.7	111.8	103.4	93.9	79.7	64.2	57.1	55.9
37.5°	1407.8	1351.9	630.2	115.3	98.7	86.8	72.5	58.3	47.6	41.6	40.4
40°	1550.5	1464.9	500.6	102.3	88.0	72.5	54.7	41.6	34.5	29.7	29.7
42.5°	1705.1	1570.7	368.6	93.9	77.3	59.5	40.4	29.7	25.0	22.6	21.4
45°	1864.4	1664.6	248.5	86.8	67.8	45.2	28.5	20.2	16.6	16.6	15.5
47.5°	2029.7	1727.7	160.5	78.5	57.1	33.3	19.0	14.3	11.9	11.9	11.9
50°	2193.8	1761.0	114.1	71.3	46.4	22.6	14.3	10.7	9.5	9.5	9.5
52.5°	2312.7	1739.6	91.6	61.8	35.7	16.6	10.7	8.3	7.1	7.1	7.1
55°	2416.1	1702.7	79.7	53.5	26.2	11.9	8.3	7.1	5.9	5.9	5.9
57.5°	2521.9	1655.1	71.3	45.2	19.0	8.3	5.9	4.8	4.8	4.8	4.8
60°	2618.2	1574.3	61.8	35.7	13.1	5.9	4.8	3.6	3.6	3.6	3.6
62.5°	2712.2	1505.3	53.5	27.3	9.5	4.8	2.4	2.4	1.2	1.2	1.2
65°	2765.7	1412.6	42.8	17.8	5.9	3.6	1.2	1.2	0.0	0.0	0.0
67.5°	2749.0	1302.0	29.7	10.7	3.6	2.4	1.2	0.0	0.0	0.0	0.0
70°	2633.7	1153.4	17.8	5.9	3.6	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	2205.7	853.7	10.7	4.8	2.4	1.2	0.0	0.0	0.0	0.0	0.0
75°	1473.2	392.4	5.9	3.6	1.2	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	674.2	117.7	3.6	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	135.5	30.9	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.5	5.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	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)