

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: P214791

Luminaire Tested: **ARCH-AF24-100-D-U-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214791
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-100-D-U-T3-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1200mA 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: 6297 lumens
Efficiency: N/A
Efficacy: 65.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 96
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

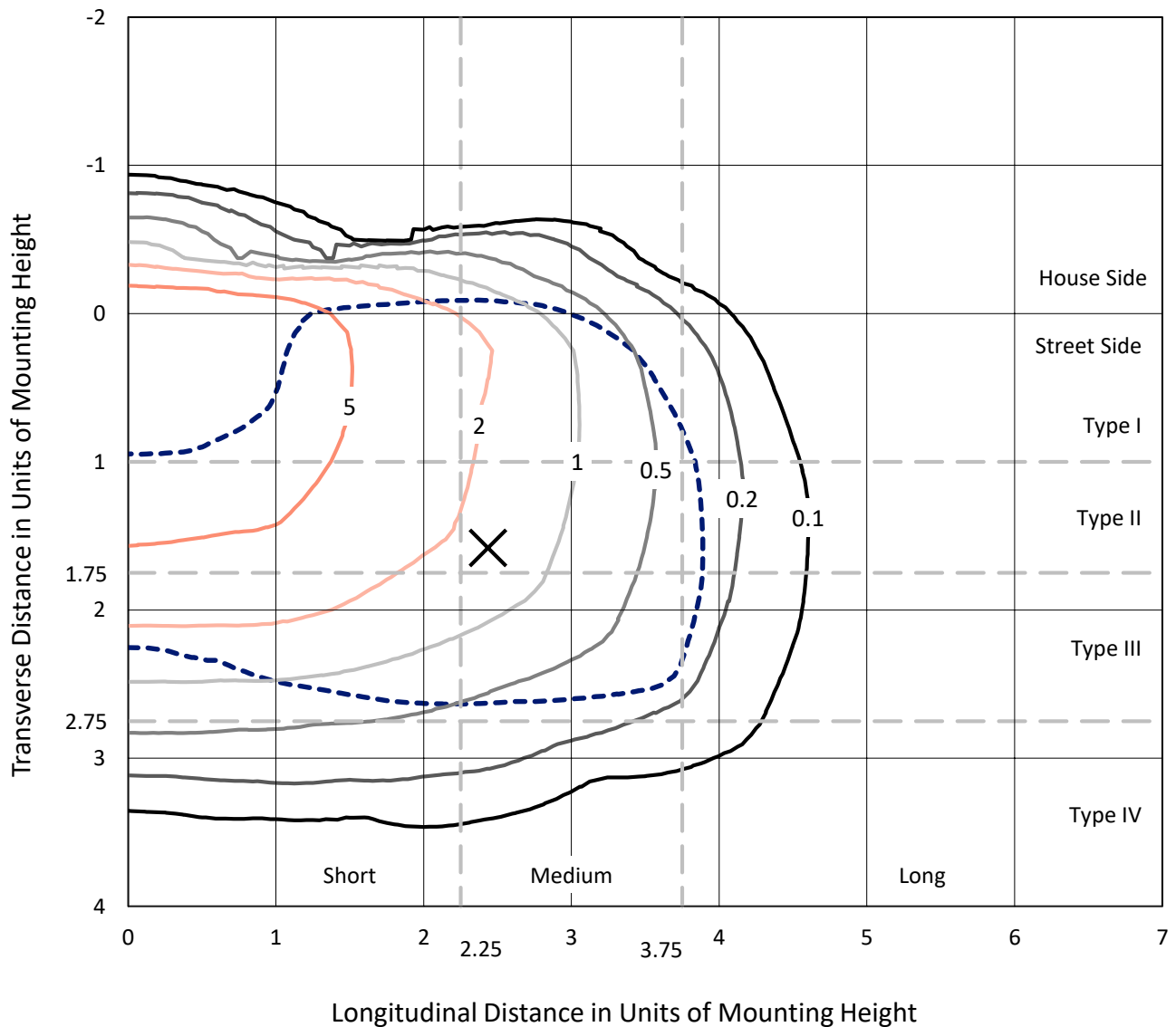


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

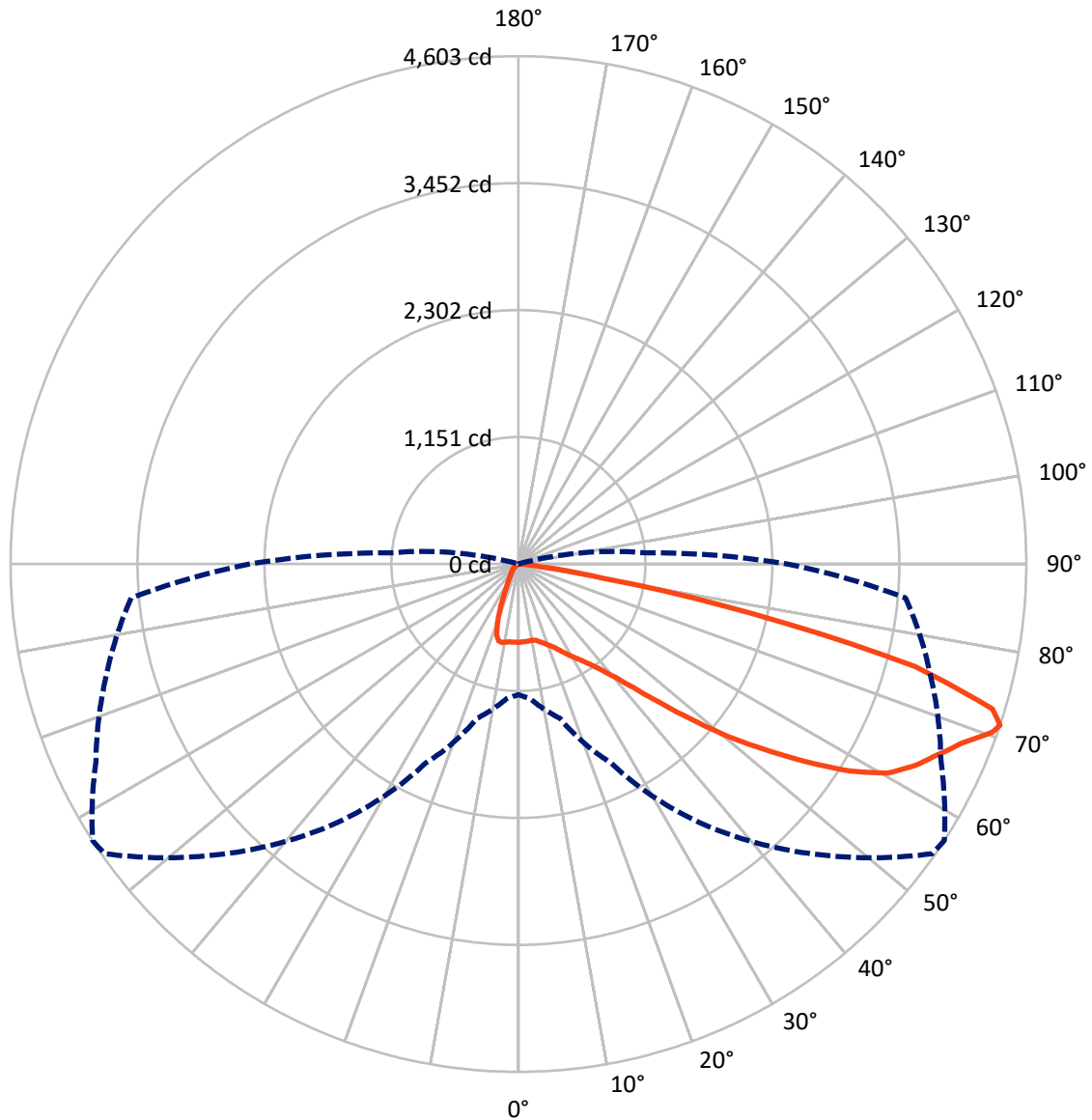


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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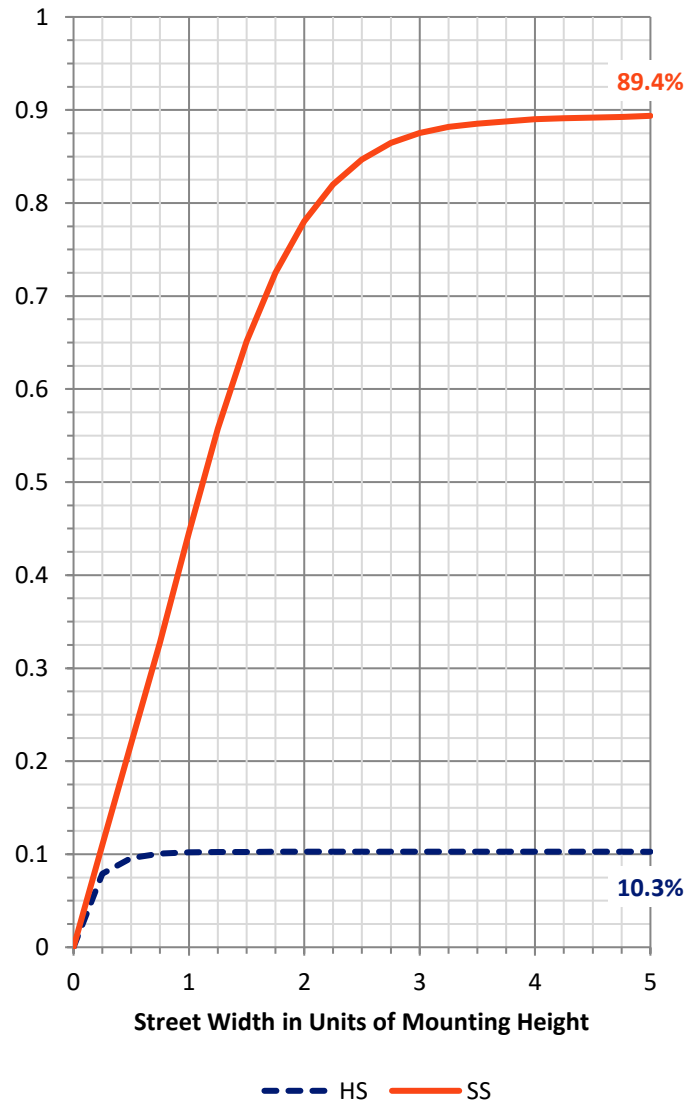
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	652.6	0.0	652.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	5644.4	0.0	5644.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	6297.0	0.0	6297.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	1.1
10°-20°	178.7	2.8
20°-30°	278.8	4.4
30°-40°	471.2	7.5
40°-50°	915.1	14.5
50°-60°	1536.8	24.4
60°-70°	1834.0	29.1
70°-80°	966.5	15.3
80°-90°	49.1	0.8
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°	6297.0	100.0
0°-180°	6297.0	100.0



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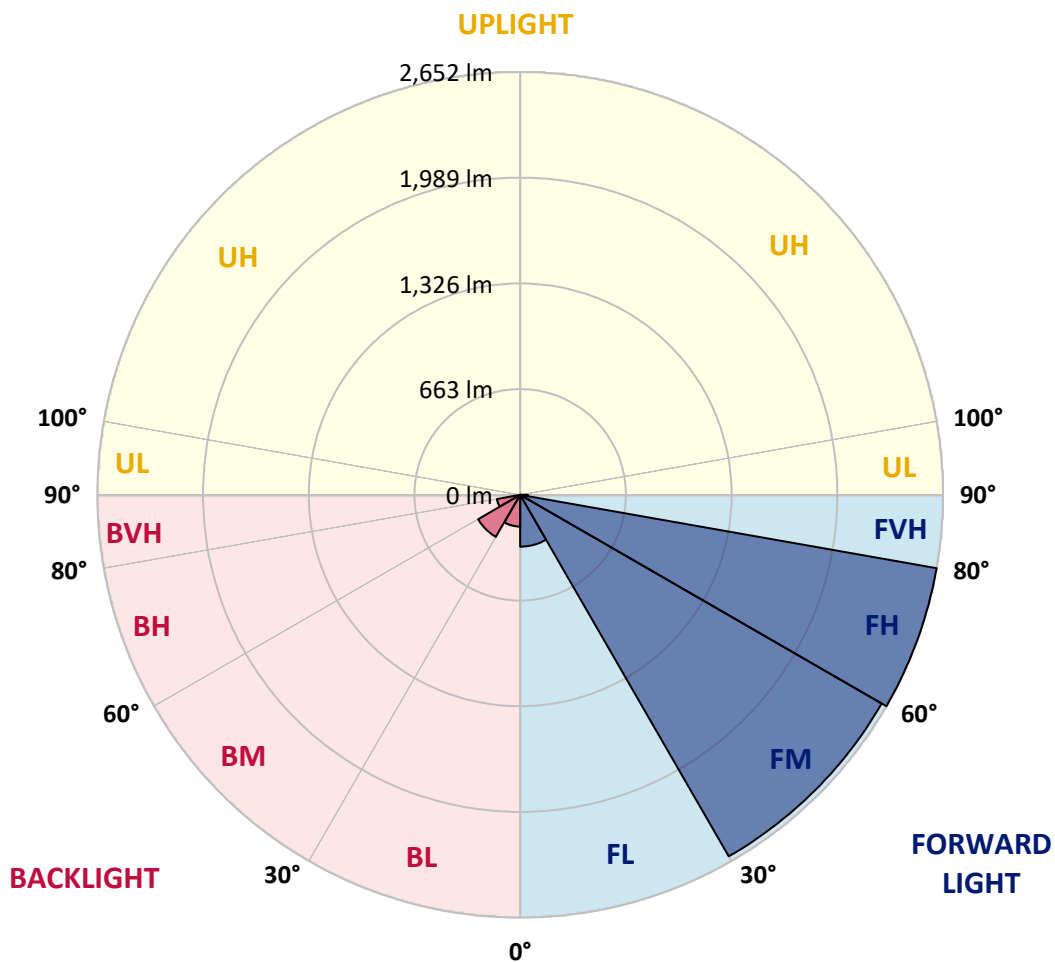
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	325.1	5.2			
FM	(30°-60°)	2618.4	41.6			
FH	(60°-80°)	2652.3	42.1			G2/5000
FVH	(80°-90°)	48.6	0.8			G1/100
BL	(0°-30°)	199.2	3.2	B1/500		
BM	(30°-60°)	304.7	4.8	B1/1000		
BH	(60°-80°)	148.2	2.4	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	701.4	701.4	701.4	702.9	704.3	704.3	707.3	705.8	705.8	705.8	708.7
5°	682.3	683.8	685.2	688.2	694.0	698.5	705.8	705.8	707.3	710.2	711.7
7.5°	655.9	657.4	661.8	667.6	679.4	689.6	701.4	704.3	708.7	716.1	719.0
10°	639.8	642.7	648.6	655.9	669.1	682.3	697.0	701.4	714.6	727.8	735.1
12.5°	635.4	636.8	642.7	654.4	670.6	686.7	705.8	710.2	729.3	749.8	761.5
15°	642.7	644.2	647.1	660.3	679.4	699.9	724.9	730.7	754.2	777.7	792.4
17.5°	655.9	655.9	658.8	670.6	691.1	714.6	746.9	755.7	782.1	808.5	824.6
20°	664.7	664.7	669.1	680.8	704.3	735.1	773.3	785.0	814.4	843.7	858.4
22.5°	673.5	675.0	679.4	692.6	719.0	761.5	805.6	817.3	851.1	881.9	896.5
25°	698.5	697.0	698.5	710.2	741.0	793.8	849.6	864.3	899.5	933.2	940.6
27.5°	767.4	764.5	745.4	738.1	761.5	827.6	905.3	920.0	961.1	994.9	994.9
30°	925.9	920.0	873.1	812.9	793.8	858.4	958.2	978.7	1031.5	1060.9	1052.1
32.5°	1126.9	1113.7	1053.5	950.8	874.5	899.5	1013.9	1037.4	1104.9	1129.8	1110.8
35°	1347.0	1345.5	1270.7	1138.7	1030.1	984.6	1085.8	1113.7	1198.8	1220.8	1190.0
37.5°	1580.3	1586.2	1536.3	1354.3	1226.7	1124.0	1181.2	1213.5	1317.7	1344.1	1314.7
40°	1840.0	1838.6	1819.5	1603.8	1462.9	1322.1	1319.1	1348.5	1474.7	1515.8	1474.7
42.5°	2168.7	2165.8	2096.8	1903.1	1749.1	1580.3	1520.2	1530.4	1671.3	1738.8	1678.6
45°	2503.3	2482.7	2403.5	2236.2	2099.8	1900.2	1785.7	1785.7	1906.1	1998.5	1904.6
47.5°	2689.6	2669.1	2636.8	2544.4	2503.3	2280.2	2111.5	2090.9	2184.9	2278.8	2146.7
50°	2934.7	2934.7	2854.0	2818.7	2889.2	2732.2	2471.0	2450.4	2495.9	2570.8	2397.6
52.5°	3128.4	3093.1	3035.9	3066.7	3267.8	3195.9	2830.5	2790.9	2826.1	2845.2	2616.3
55°	3209.1	3175.3	3170.9	3283.9	3595.0	3495.2	3198.8	3163.6	3160.6	3066.7	2807.0
57.5°	3225.2	3195.9	3251.6	3449.7	3913.4	3740.2	3565.6	3539.2	3457.0	3222.3	3002.2
60°	3088.7	3103.4	3238.4	3540.7	4101.2	3953.0	3875.2	3847.3	3658.1	3354.3	3219.3
62.5°	2808.5	2843.7	3096.1	3549.5	4032.2	4039.6	4046.9	4027.8	3813.6	3474.6	3438.0
65°	2476.9	2487.1	2790.9	3427.7	3911.9	4013.2	4173.1	4171.6	3932.5	3609.6	3684.5
67.5°	2041.1	2058.7	2321.3	3016.8	3671.3	4001.4	4338.9	4334.5	4067.4	3763.7	3831.2
70°	1518.7	1540.7	1753.5	2346.3	3134.2	3854.7	4556.1	4559.0	4209.8	3881.1	3730.0
71°	1184.1	1223.8	1446.8	1992.6	2859.8	3706.5	4576.6	4603.0	4225.9	3865.0	3521.6
72.5°	581.1	628.0	908.3	1402.8	2353.6	3374.9	4441.6	4493.0	4124.7	3663.9	3011.0
75°	151.1	159.9	271.5	573.7	1261.9	2236.2	3581.8	3712.4	3371.9	2789.4	1840.0
77.5°	95.4	98.3	127.7	223.0	472.5	849.6	2104.2	2168.7	1926.6	1413.0	648.6
80°	67.5	69.0	80.7	143.8	275.9	248.0	757.1	785.0	697.0	374.2	115.9
82.5°	41.1	41.1	58.7	92.4	170.2	135.0	199.6	212.8	187.8	104.2	38.2
85°	23.5	24.9	36.7	63.1	80.7	66.0	74.8	79.2	80.7	69.0	16.1
87.5°	19.1	20.5	32.3	52.8	44.0	32.3	32.3	33.7	35.2	41.1	7.3
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°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	708.7	708.7	710.2	708.7	708.7	708.7	710.2	710.2	710.2	713.1	714.6
5°	711.7	711.7	711.7	710.2	708.7	708.7	711.7	713.1	713.1	717.5	717.5
7.5°	719.0	719.0	716.1	713.1	710.2	705.8	707.3	708.7	707.3	708.7	708.7
10°	735.1	735.1	730.7	724.9	716.1	702.9	685.2	663.2	642.7	635.4	632.4
12.5°	761.5	760.1	751.3	741.0	721.9	676.4	610.4	532.6	468.1	450.5	444.6
15°	790.9	788.0	777.7	760.1	708.7	588.4	450.5	350.7	289.1	274.4	271.5
17.5°	821.7	817.3	802.6	767.4	648.6	437.3	290.5	220.1	186.4	183.4	184.9
20°	854.0	848.1	827.6	752.7	523.8	292.0	187.8	170.2	167.3	167.3	168.7
22.5°	890.7	883.3	855.5	699.9	381.5	193.7	161.4	159.9	158.5	157.0	157.0
25°	933.2	924.4	881.9	604.5	262.7	158.5	154.1	149.7	146.7	143.8	142.3
27.5°	984.6	972.8	902.4	487.2	180.5	148.2	145.3	137.9	132.1	126.2	126.2
30°	1035.9	1021.3	896.5	366.8	146.7	137.9	132.1	123.3	114.5	108.6	107.1
32.5°	1090.2	1075.6	858.4	246.5	133.5	126.2	118.9	105.6	95.4	88.0	86.6
35°	1170.9	1159.2	783.6	162.9	120.3	111.5	101.2	88.0	74.8	67.5	66.0
37.5°	1291.3	1276.6	691.1	124.7	105.6	92.4	83.6	69.0	55.8	48.4	47.0
40°	1452.7	1408.6	581.1	110.0	92.4	76.3	64.6	49.9	39.6	35.2	35.2
42.5°	1640.5	1536.3	462.2	99.8	82.2	63.1	47.0	33.7	27.9	26.4	26.4
45°	1840.0	1655.2	343.4	92.4	71.9	49.9	33.7	23.5	20.5	19.1	19.1
47.5°	2045.5	1752.0	239.2	83.6	60.2	38.2	23.5	17.6	14.7	13.2	13.2
50°	2237.7	1815.1	168.7	74.8	51.4	27.9	17.6	13.2	10.3	10.3	10.3
52.5°	2371.2	1809.2	121.8	64.6	39.6	19.1	11.7	8.8	8.8	8.8	8.8
55°	2488.6	1787.2	95.4	55.8	30.8	13.2	8.8	7.3	7.3	5.9	5.9
57.5°	2588.4	1752.0	80.7	45.5	22.0	10.3	5.9	5.9	4.4	4.4	4.4
60°	2673.5	1708.0	67.5	38.2	14.7	7.3	4.4	2.9	2.9	1.5	2.9
62.5°	2789.4	1680.1	58.7	29.3	10.3	4.4	2.9	1.5	1.5	0.0	0.0
65°	2874.5	1627.3	49.9	20.5	5.9	2.9	1.5	1.5	0.0	0.0	0.0
67.5°	2877.4	1531.9	36.7	11.7	4.4	2.9	1.5	0.0	0.0	0.0	0.0
70°	2645.6	1305.9	23.5	5.9	2.9	1.5	1.5	0.0	0.0	0.0	0.0
71°	2432.8	1156.3	19.1	4.4	2.9	1.5	0.0	0.0	0.0	0.0	0.0
72.5°	2004.4	849.6	14.7	4.4	1.5	1.5	0.0	0.0	0.0	0.0	0.0
75°	1104.9	308.1	7.3	2.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	353.6	93.9	4.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	60.2	14.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.5	5.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.9	1.5	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)