

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: P257696

Luminaire Tested: **ARCH-AF24-60-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257696
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA 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: 5306.1 lumens
Efficiency: N/A
Efficacy: 82.9 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

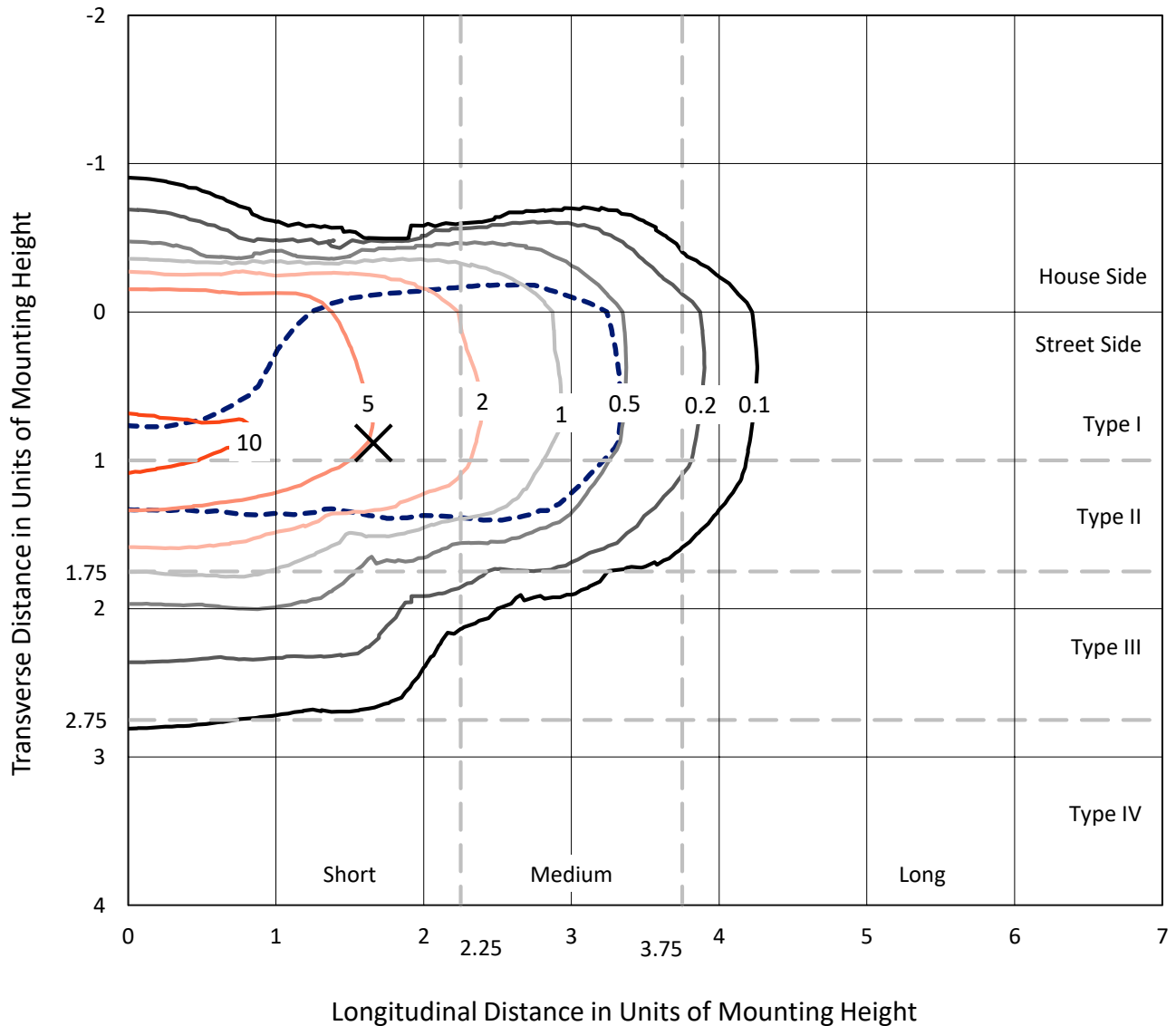
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P257696
 CATALOG NUMBER: ARCH-AF24-60-D-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

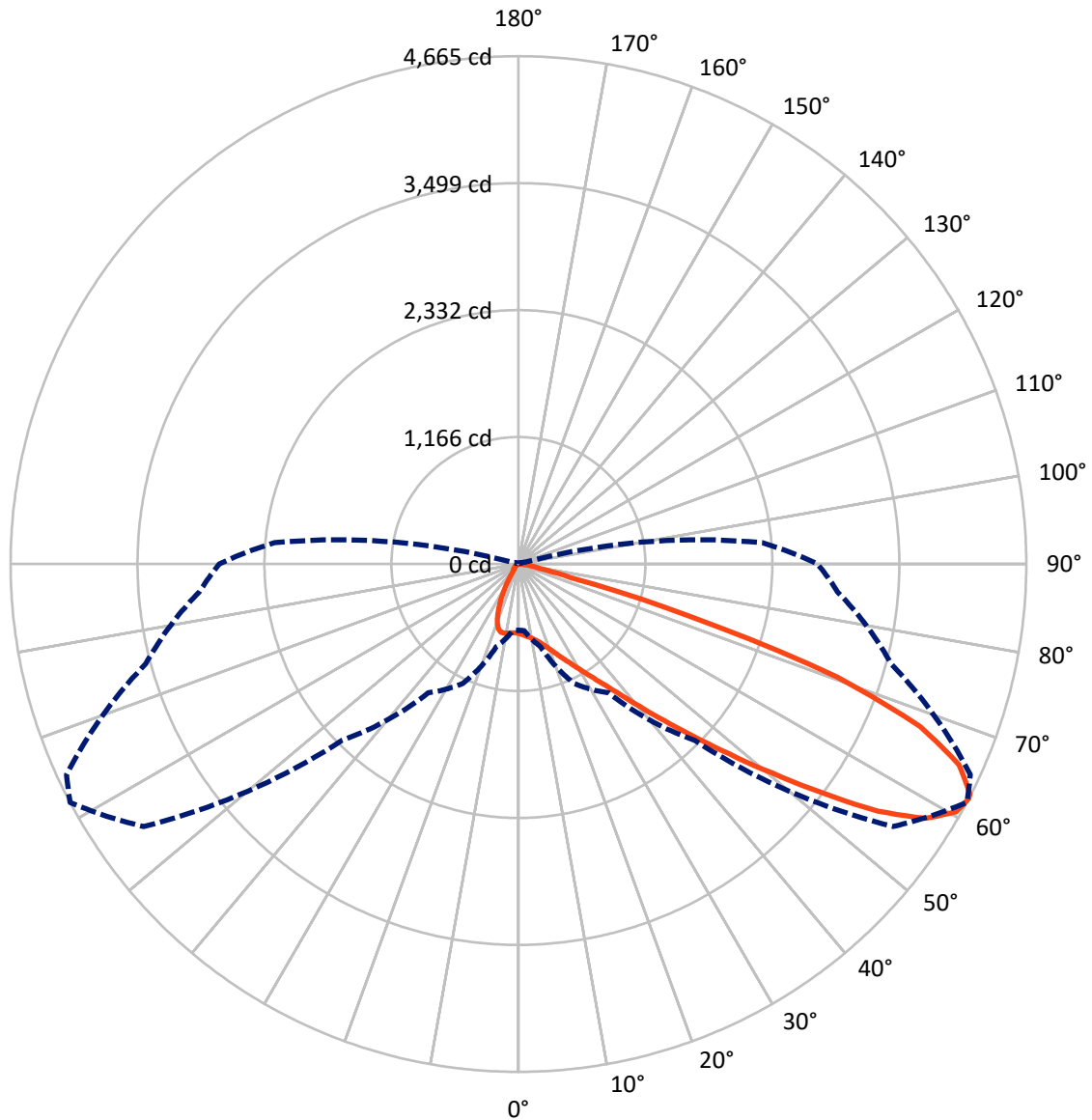
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.2 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P257696
CATALOG NUMBER: ARCH-AF24-60-D-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: P257696

CATALOG NUMBER: ARCH-AF24-60-D-U-T2U-HSS

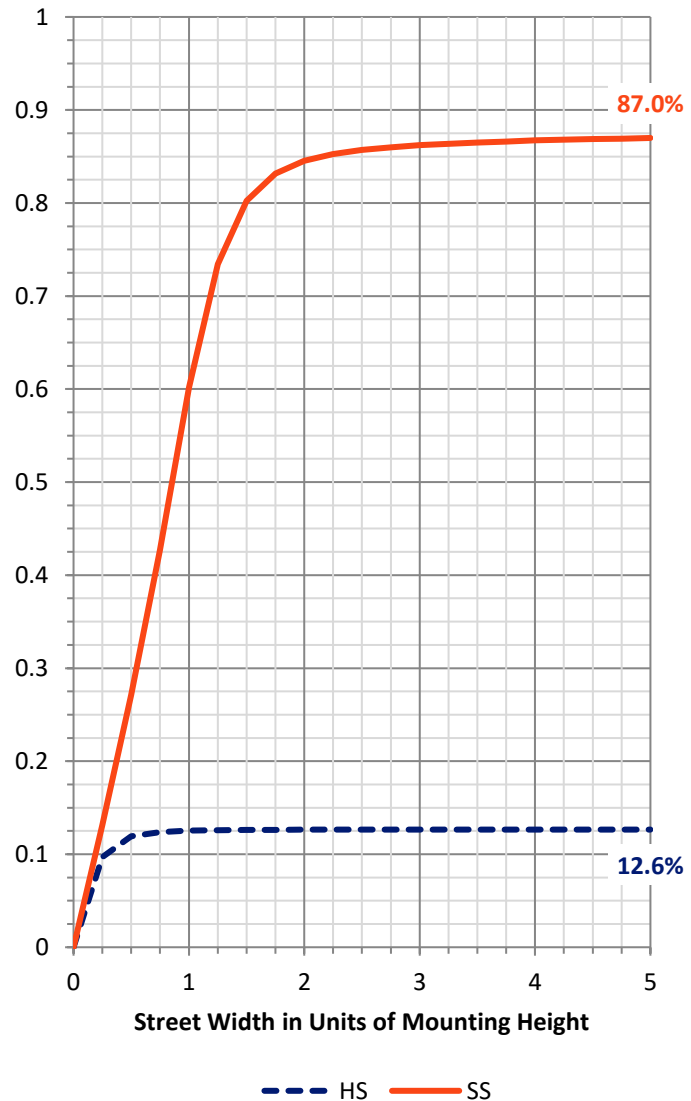
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	678.5	0.0	678.5
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4627.6	0.0	4627.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	5306.1	0.0	5306.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.5	1.2
10°-20°	171.8	3.2
20°-30°	288.5	5.4
30°-40°	553.0	10.4
40°-50°	1129.5	21.3
50°-60°	1494.7	28.2
60°-70°	1161.2	21.9
70°-80°	419.1	7.9
80°-90°	26.7	0.5
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°	5306.1	100.0
0°-180°	5306.1	100.0

Coefficient of Utilization



REPORT NUMBER: P257696

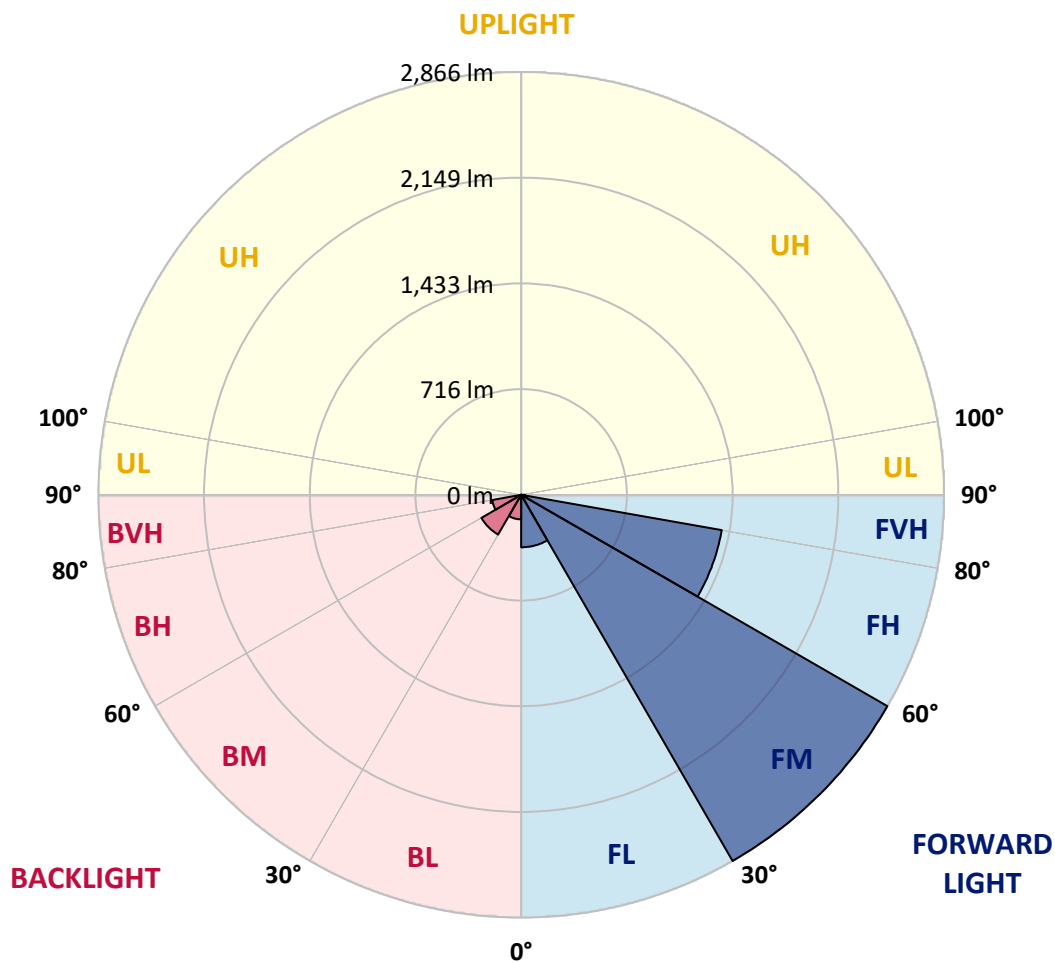
CATALOG NUMBER: ARCH-AF24-60-D-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	355.7	6.7			
FM	(30°-60°)	2865.8	54.0			
FH	(60°-80°)	1380.5	26.0			G1/1800
FVH	(80°-90°)	25.6	0.5			G1/100
BL	(0°-30°)	166.0	3.1	B1/500		
BM	(30°-60°)	311.5	5.9	B1/1000		
BH	(60°-80°)	199.8	3.8	B1/500		G1/500
BVH	(80°-90°)	1.2	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





REPORT NUMBER: P257696

CATALOG NUMBER: ARCH-AF24-60-D-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1
2.5°	656.1	654.8	653.6	652.2	652.2	650.9	649.6	647.0	644.4	641.8	640.5
5°	667.9	666.6	665.2	666.6	665.2	665.2	664.0	661.3	658.8	654.8	650.9
7.5°	677.0	675.7	674.4	675.7	677.0	678.3	679.6	677.0	675.7	670.4	666.6
10°	688.8	687.4	686.1	688.8	688.8	695.3	696.6	695.3	694.0	690.1	683.5
12.5°	705.7	707.1	707.1	709.6	712.3	720.1	722.7	718.7	718.7	713.5	705.7
15°	737.0	737.0	737.0	739.6	740.9	751.4	754.0	750.0	752.7	743.6	735.7
17.5°	767.0	768.3	770.9	776.1	776.1	785.3	790.5	790.5	795.8	784.0	773.6
20°	797.0	798.3	802.2	814.0	814.0	825.7	834.8	838.7	843.9	832.3	814.0
22.5°	829.6	829.6	836.2	854.4	850.5	874.0	891.0	897.4	902.7	887.0	858.4
25°	879.2	874.0	879.2	896.2	893.5	926.2	957.5	964.0	970.5	952.3	909.2
27.5°	973.1	965.3	947.0	948.4	948.4	986.1	1030.5	1039.6	1043.5	1027.9	974.5
30°	1160.9	1160.9	1093.1	1047.5	1017.4	1051.4	1114.0	1129.6	1134.9	1111.4	1041.0
32.5°	1488.4	1488.4	1363.2	1247.1	1133.5	1133.5	1205.3	1234.0	1239.2	1211.8	1129.6
35°	1905.8	1903.2	1715.4	1556.2	1334.4	1251.0	1312.2	1360.5	1376.2	1339.7	1244.4
37.5°	2349.3	2332.3	2130.2	1947.6	1643.6	1438.8	1457.1	1521.0	1535.3	1505.4	1393.2
40°	2709.4	2689.7	2526.7	2374.1	2042.7	1738.8	1665.8	1724.5	1741.5	1699.7	1570.5
42.5°	3035.5	2987.2	2875.0	2765.4	2501.9	2258.0	1943.6	1967.1	1985.3	1941.0	1770.1
45°	3271.6	3197.2	3139.8	3105.9	2966.4	2828.0	2303.7	2256.7	2263.2	2208.4	1988.0
47.5°	3278.0	3225.9	3231.1	3319.9	3377.3	3372.1	2772.0	2604.9	2580.2	2488.9	2220.2
50°	2965.0	2995.0	3090.2	3343.3	3653.8	3841.6	3329.0	3017.2	2942.8	2778.4	2451.1
52.5°	2443.2	2490.2	2668.9	3095.4	3694.2	4150.7	3906.9	3488.2	3355.1	3065.5	2628.5
55°	1913.6	1916.3	2104.1	2538.5	3424.2	4206.9	4368.6	4006.0	3802.5	3283.3	2745.9
57.5°	1316.2	1387.9	1626.7	1918.9	2815.1	3927.7	4542.1	4407.8	4145.5	3417.7	2828.0
60°	862.2	866.1	1144.0	1481.8	1916.3	3195.9	4436.4	4620.4	4423.4	3497.3	2884.1
62°	607.8	614.4	786.5	1210.6	1444.0	2290.6	4203.0	4664.8	4580.0	3544.2	2942.8
62.5°	563.5	568.8	713.5	1142.7	1356.6	2054.5	4119.4	4654.3	4603.4	3559.9	2963.7
65°	413.5	413.5	467.0	785.3	994.0	1110.1	3490.7	4446.9	4572.1	3685.1	3041.9
67.5°	319.6	322.2	340.4	484.0	750.0	673.1	2228.0	3979.9	4246.0	3870.3	3086.3
70°	275.3	273.9	286.9	320.9	541.3	447.4	980.9	3105.9	3556.0	3823.4	3045.9
72.5°	203.5	204.8	234.8	281.7	377.0	290.9	443.6	1648.8	2306.2	2992.4	2610.2
75°	130.4	131.8	165.6	221.8	271.3	190.5	255.6	491.7	944.4	1659.2	1596.6
77.5°	87.4	90.0	108.2	155.2	237.4	118.7	160.4	206.1	284.4	622.3	572.6
80°	58.7	58.7	69.2	104.3	150.0	99.1	86.1	137.0	147.4	193.0	96.6
82.5°	39.2	39.2	45.6	69.2	97.8	88.7	52.2	74.4	86.1	96.6	34.0
85°	23.5	23.5	31.3	43.1	63.9	49.6	34.0	41.7	44.4	61.3	18.3
87.5°	14.3	13.1	20.9	30.0	34.0	30.0	22.2	22.2	23.5	34.0	9.1
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: P257696

CATALOG NUMBER: ARCH-AF24-60-D-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1	639.1
2.5°	637.9	636.6	635.3	632.7	628.7	626.1	623.5	620.9	618.3	618.3	622.3
5°	649.6	645.7	640.5	635.3	627.5	622.3	618.3	613.1	610.5	610.5	611.8
7.5°	664.0	660.0	650.9	641.8	630.0	620.9	611.8	600.1	591.0	587.0	591.0
10°	679.6	674.4	661.3	647.0	633.9	610.5	580.5	544.0	512.6	498.3	504.8
12.5°	699.2	692.6	677.0	657.5	627.5	570.1	495.7	410.9	357.4	332.7	337.9
15°	727.9	718.7	696.6	666.6	600.1	476.1	354.9	257.0	207.5	186.6	189.1
17.5°	761.8	750.0	720.1	664.0	529.6	343.1	211.3	150.0	129.1	123.9	123.9
20°	798.3	782.7	743.6	644.4	422.7	215.2	131.8	114.8	107.0	103.0	103.0
22.5°	836.2	815.3	763.1	598.7	301.4	134.3	108.2	96.6	87.4	83.5	83.5
25°	881.8	854.4	782.7	519.1	191.8	108.2	92.6	80.9	71.7	66.5	67.8
27.5°	935.3	900.1	799.6	420.0	123.9	93.9	76.9	65.3	57.4	54.8	54.8
30°	991.3	949.6	803.5	314.4	100.5	80.9	63.9	53.5	48.3	45.6	45.6
32.5°	1068.4	1013.5	791.8	208.7	84.8	67.8	53.5	44.4	40.4	39.2	39.2
35°	1170.1	1097.0	764.5	129.1	71.7	56.1	44.4	39.2	35.2	34.0	34.0
37.5°	1299.2	1213.1	716.2	88.7	61.3	45.6	37.8	34.0	31.3	30.0	30.0
40°	1471.4	1354.0	653.6	76.9	52.2	39.2	32.6	30.0	27.4	27.4	27.4
42.5°	1654.0	1524.9	572.6	67.8	44.4	34.0	28.7	26.1	24.8	23.5	23.5
45°	1853.6	1699.7	472.2	60.0	37.8	30.0	26.1	22.2	20.9	20.9	20.9
47.5°	2051.9	1879.7	362.6	52.2	32.6	26.1	22.2	19.5	18.3	17.0	17.0
50°	2255.4	2042.7	266.1	45.6	28.7	23.5	19.5	17.0	14.3	13.1	13.1
52.5°	2402.8	2140.6	194.4	39.2	24.8	19.5	15.7	13.1	10.4	9.1	9.1
55°	2511.0	2200.6	142.2	32.6	22.2	17.0	13.1	10.4	7.9	7.9	6.5
57.5°	2595.8	2229.3	107.0	28.7	19.5	14.3	10.4	7.9	6.5	5.2	5.2
60°	2661.1	2230.6	79.6	23.5	17.0	11.8	7.9	5.2	3.9	3.9	3.9
62°	2747.1	2247.5	65.3	19.5	15.7	10.4	6.5	3.9	2.7	1.3	1.3
62.5°	2772.0	2254.1	62.6	19.5	14.3	9.1	5.2	3.9	2.7	1.3	1.3
65°	2886.8	2265.8	48.3	15.7	11.8	7.9	3.9	2.7	0.0	0.0	0.0
67.5°	2991.1	2247.5	35.2	11.8	9.1	5.2	3.9	1.3	0.0	0.0	0.0
70°	2980.7	2122.3	24.8	7.9	6.5	3.9	2.7	0.0	0.0	0.0	0.0
72.5°	2456.3	1588.8	17.0	6.5	3.9	2.7	1.3	0.0	0.0	0.0	0.0
75°	1483.2	695.3	11.8	3.9	3.9	2.7	1.3	0.0	0.0	0.0	0.0
77.5°	486.5	251.7	7.9	2.7	2.7	1.3	1.3	0.0	0.0	0.0	0.0
80°	79.6	41.7	3.9	2.7	2.7	1.3	1.3	0.0	0.0	0.0	0.0
82.5°	24.8	10.4	2.7	2.7	1.3	1.3	0.0	0.0	0.0	0.0	0.0
85°	9.1	3.9	2.7	2.7	1.3	1.3	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	2.7	2.7	2.7	1.3	1.3	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)