

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: P214788

Luminaire Tested: **ARCH-AF24-70-D-U-T3-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214788
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-AF24-70-D-U-T3-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 930mA 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: 5381 lumens
Efficiency: N/A
Efficacy: 72.7 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): 74
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

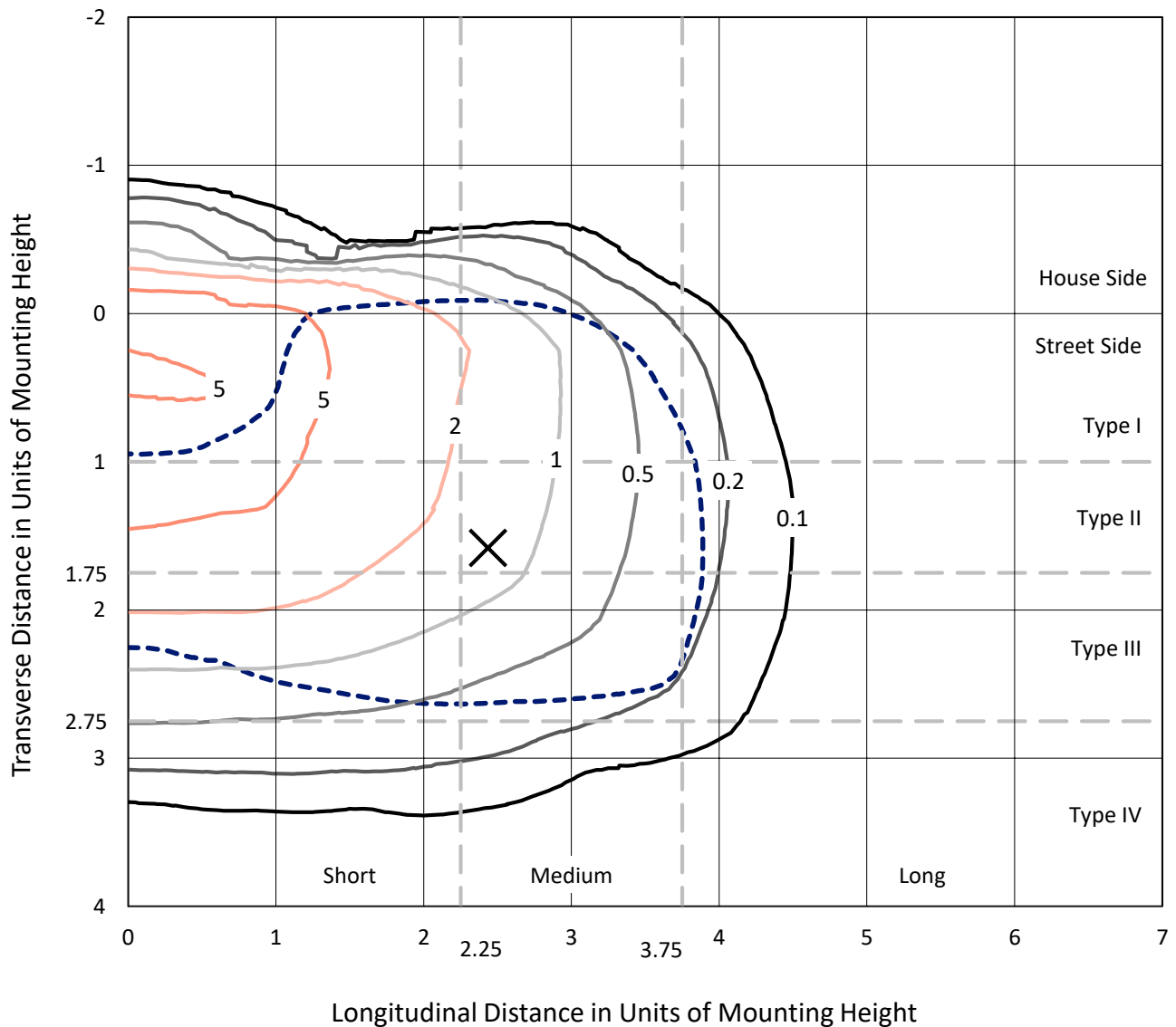


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

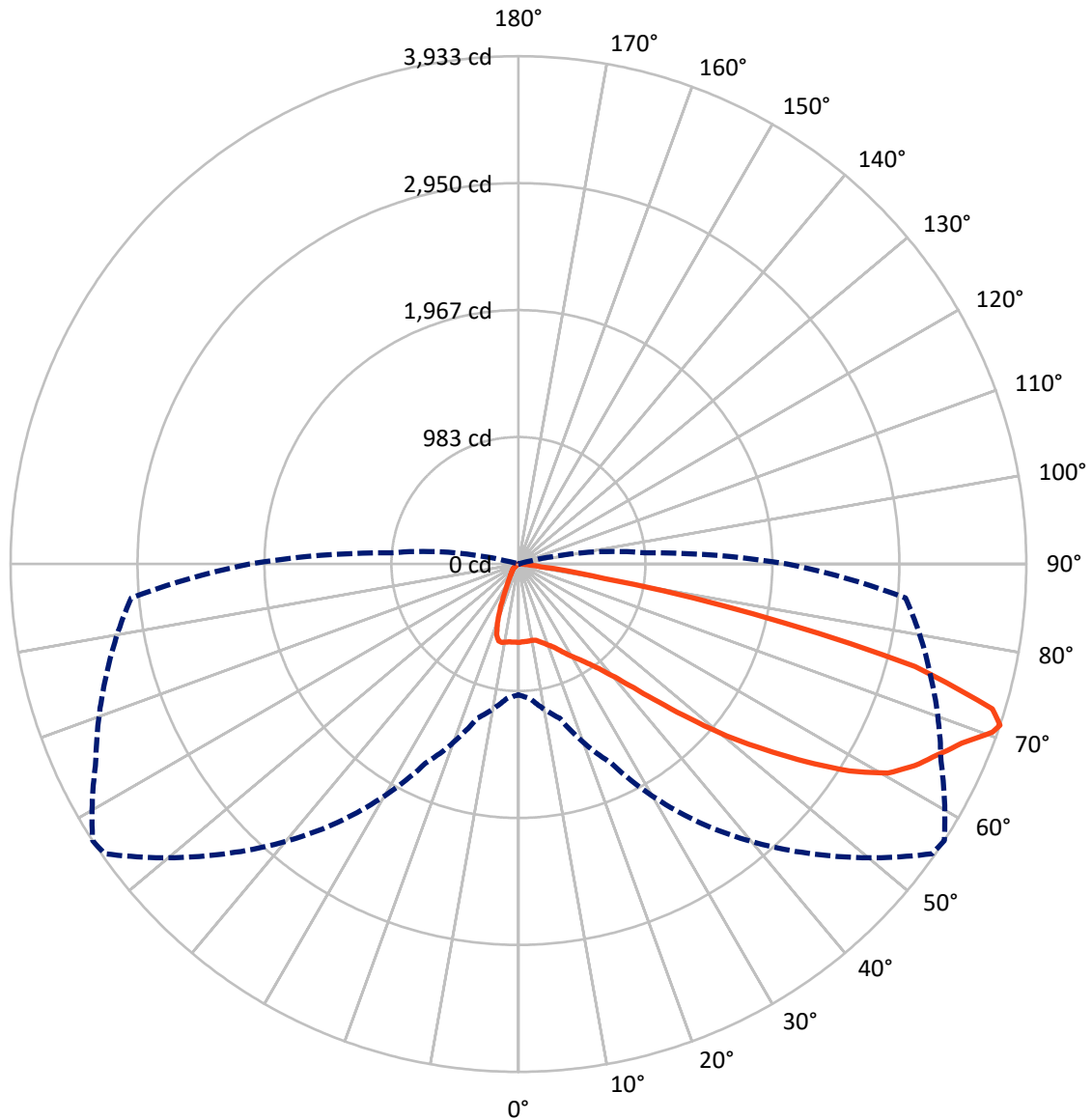


Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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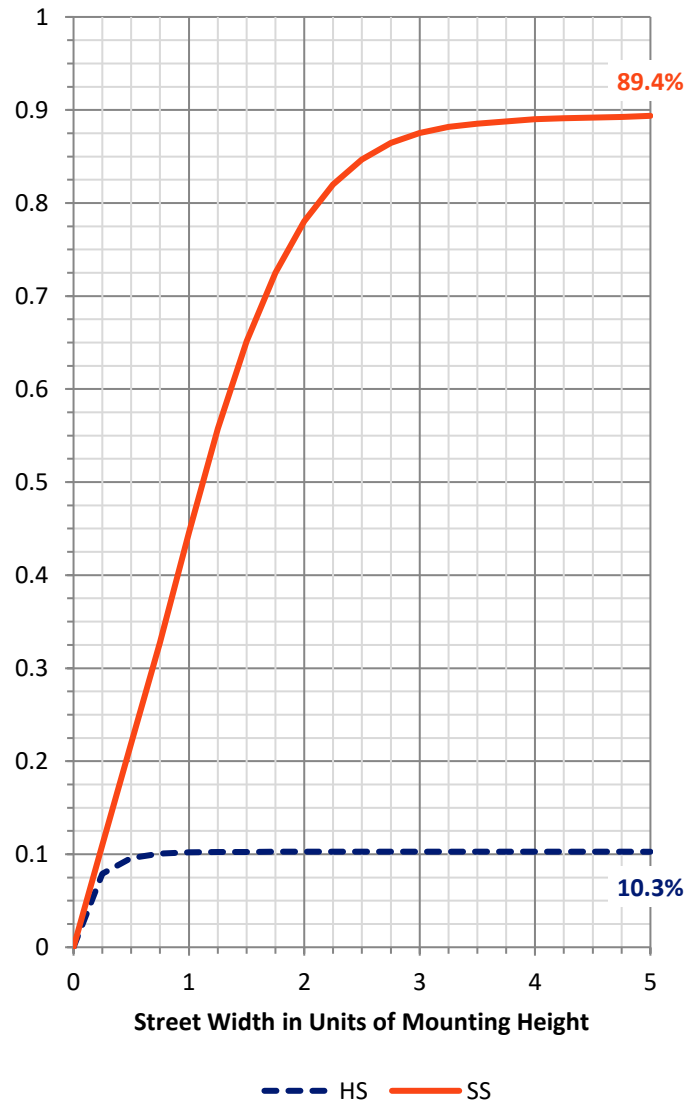
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	557.6	0.0	557.6
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	4823.4	0.0	4823.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	5381.0	0.0	5381.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.1	1.1
10°-20°	152.7	2.8
20°-30°	238.2	4.4
30°-40°	402.6	7.5
40°-50°	782.0	14.5
50°-60°	1313.2	24.4
60°-70°	1567.2	29.1
70°-80°	825.9	15.3
80°-90°	42.0	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°	5381.0	100.0
0°-180°	5381.0	100.0

Coefficient of Utilization



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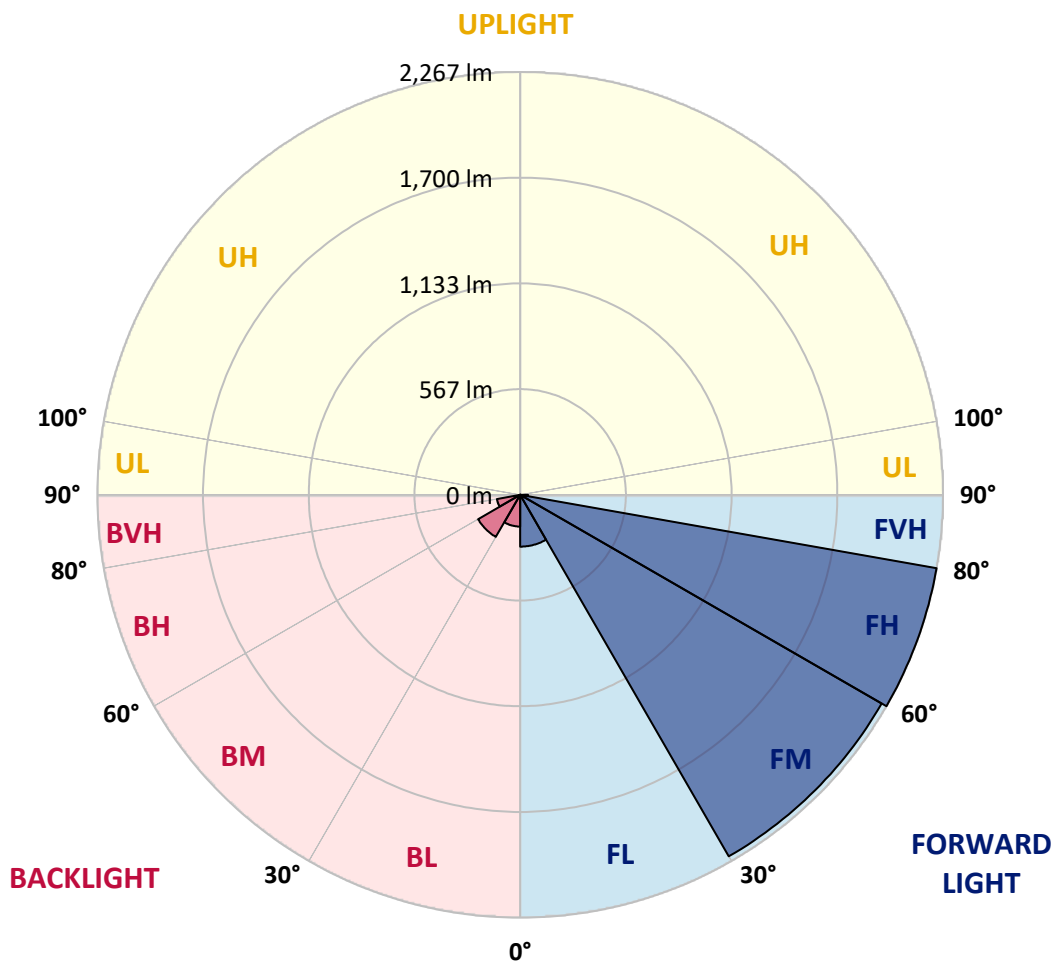
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	277.8	5.2			
FM	(30°-60°)	2237.5	41.6			
FH	(60°-80°)	2266.5	42.1			G2/5000
FVH	(80°-90°)	41.6	0.8			G1/100
BL	(0°-30°)	170.2	3.2	B1/500		
BM	(30°-60°)	260.4	4.8	B1/1000		
BH	(60°-80°)	126.6	2.4	B1/500		G1/500
BVH	(80°-90°)	0.4	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°	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1
2.5°	599.4	599.4	599.4	600.6	601.9	601.9	604.4	603.1	603.1	603.1	605.6
5°	583.1	584.3	585.6	588.1	593.1	596.8	603.1	603.1	604.4	606.9	608.1
7.5°	560.5	561.7	565.5	570.5	580.5	589.3	599.4	601.9	605.6	611.9	614.4
10°	546.7	549.2	554.2	560.5	571.8	583.1	595.6	599.4	610.6	621.9	628.2
12.5°	542.9	544.2	549.2	559.2	573.0	586.8	603.1	606.9	623.2	640.7	650.8
15°	549.2	550.5	553.0	564.2	580.5	598.1	619.4	624.4	644.5	664.6	677.1
17.5°	560.5	560.5	563.0	573.0	590.6	610.6	638.2	645.8	668.3	690.9	704.7
20°	568.0	568.0	571.8	581.8	601.9	628.2	660.8	670.8	695.9	721.0	733.5
22.5°	575.5	576.8	580.5	591.8	614.4	650.8	688.4	698.4	727.3	753.6	766.1
25°	596.8	595.6	596.8	606.9	633.2	678.4	726.0	738.5	768.6	797.5	803.7
27.5°	655.8	653.3	637.0	630.7	650.8	707.2	773.6	786.2	821.3	850.1	850.1
30°	791.2	786.2	746.1	694.7	678.4	733.5	818.8	836.3	881.5	906.6	899.0
32.5°	963.0	951.7	900.3	812.5	747.3	768.6	866.4	886.5	944.2	965.5	949.2
35°	1151.1	1149.8	1085.9	973.0	880.2	841.4	927.9	951.7	1024.4	1043.2	1016.9
37.5°	1350.4	1355.5	1312.8	1157.3	1048.2	960.5	1009.4	1037.0	1126.0	1148.6	1123.5
40°	1572.4	1571.1	1554.8	1370.5	1250.1	1129.8	1127.2	1152.3	1260.2	1295.3	1260.2
42.5°	1853.2	1850.7	1791.8	1626.3	1494.6	1350.4	1299.0	1307.8	1428.2	1485.9	1434.4
45°	2139.1	2121.6	2053.9	1910.9	1794.3	1623.8	1526.0	1526.0	1628.8	1707.8	1627.5
47.5°	2298.4	2280.8	2253.2	2174.2	2139.1	1948.5	1804.3	1786.8	1867.0	1947.3	1834.4
50°	2507.8	2507.8	2438.8	2408.7	2468.9	2334.7	2111.5	2094.0	2132.9	2196.8	2048.8
52.5°	2673.3	2643.2	2594.3	2620.6	2792.4	2731.0	2418.7	2384.9	2415.0	2431.3	2235.7
55°	2742.2	2713.4	2709.6	2806.2	3072.0	2986.8	2733.5	2703.4	2700.9	2620.6	2398.7
57.5°	2756.0	2731.0	2778.6	2947.9	3344.1	3196.2	3046.9	3024.4	2954.2	2753.5	2565.5
60°	2639.4	2652.0	2767.3	3025.6	3504.6	3378.0	3311.5	3287.7	3125.9	2866.4	2751.0
62.5°	2399.9	2430.0	2645.7	3033.1	3445.7	3451.9	3458.2	3441.9	3258.8	2969.2	2937.9
65°	2116.6	2125.3	2384.9	2929.1	3342.9	3429.4	3566.1	3564.8	3360.4	3084.6	3148.5
67.5°	1744.2	1759.2	1983.6	2578.0	3137.2	3419.3	3707.7	3704.0	3475.8	3216.2	3273.9
70°	1297.8	1316.6	1498.4	2005.0	2678.3	3294.0	3893.3	3895.8	3597.4	3316.5	3187.4
71°	1011.9	1045.7	1236.3	1702.8	2443.8	3167.3	3910.9	3933.4	3611.2	3302.7	3009.3
72.5°	496.5	536.7	776.2	1198.7	2011.2	2883.9	3795.5	3839.4	3524.7	3131.0	2573.0
75°	129.2	136.7	232.0	490.3	1078.3	1910.9	3060.7	3172.3	2881.4	2383.6	1572.4
77.5°	81.5	84.0	109.1	190.6	403.8	726.0	1798.1	1853.2	1646.4	1207.5	554.2
80°	57.7	58.9	69.0	122.9	235.7	211.9	647.0	670.8	595.6	319.7	99.1
82.5°	35.1	35.1	50.2	79.0	145.5	115.4	170.5	181.8	160.5	89.0	32.6
85°	20.1	21.3	31.3	53.9	69.0	56.4	63.9	67.7	69.0	58.9	13.8
87.5°	16.3	17.6	27.6	45.1	37.6	27.6	27.6	28.8	30.1	35.1	6.3
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°	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1
2.5°	605.6	605.6	606.9	605.6	605.6	605.6	606.9	606.9	606.9	609.4	610.6
5°	608.1	608.1	608.1	606.9	605.6	605.6	608.1	609.4	609.4	613.2	613.2
7.5°	614.4	614.4	611.9	609.4	606.9	603.1	604.4	605.6	604.4	605.6	605.6
10°	628.2	628.2	624.4	619.4	611.9	600.6	585.6	566.8	549.2	542.9	540.4
12.5°	650.8	649.5	642.0	633.2	616.9	578.0	521.6	455.2	400.0	384.9	379.9
15°	675.8	673.3	664.6	649.5	605.6	502.8	384.9	299.7	247.0	234.5	232.0
17.5°	702.2	698.4	685.9	655.8	554.2	373.7	248.3	188.1	159.2	156.7	158.0
20°	729.8	724.7	707.2	643.2	447.6	249.5	160.5	145.5	142.9	142.9	144.2
22.5°	761.1	754.8	731.0	598.1	326.0	165.5	137.9	136.7	135.4	134.2	134.2
25°	797.5	789.9	753.6	516.6	224.4	135.4	131.7	127.9	125.4	122.9	121.6
27.5°	841.4	831.3	771.1	416.3	154.2	126.6	124.1	117.9	112.8	107.8	107.8
30°	885.2	872.7	766.1	313.5	125.4	117.9	112.8	105.3	97.8	92.8	91.5
32.5°	931.6	919.1	733.5	210.7	114.1	107.8	101.6	90.3	81.5	75.2	74.0
35°	1000.6	990.6	669.6	139.2	102.8	95.3	86.5	75.2	63.9	57.7	56.4
37.5°	1103.4	1090.9	590.6	106.6	90.3	79.0	71.5	58.9	47.6	41.4	40.1
40°	1241.3	1203.7	496.5	94.0	79.0	65.2	55.2	42.6	33.9	30.1	30.1
42.5°	1401.8	1312.8	395.0	85.3	70.2	53.9	40.1	28.8	23.8	22.6	22.6
45°	1572.4	1414.4	293.4	79.0	61.4	42.6	28.8	20.1	17.6	16.3	16.3
47.5°	1747.9	1497.1	204.4	71.5	51.4	32.6	20.1	15.0	12.5	11.3	11.3
50°	1912.2	1551.1	144.2	63.9	43.9	23.8	15.0	11.3	8.8	8.8	8.8
52.5°	2026.3	1546.0	104.1	55.2	33.9	16.3	10.0	7.5	7.5	7.5	7.5
55°	2126.6	1527.2	81.5	47.6	26.3	11.3	7.5	6.3	6.3	5.0	5.0
57.5°	2211.9	1497.1	69.0	38.9	18.8	8.8	5.0	5.0	3.8	3.8	3.8
60°	2284.6	1459.5	57.7	32.6	12.5	6.3	3.8	2.5	2.5	1.3	2.5
62.5°	2383.6	1435.7	50.2	25.1	8.8	3.8	2.5	1.3	1.3	0.0	0.0
65°	2456.4	1390.6	42.6	17.6	5.0	2.5	1.3	1.3	0.0	0.0	0.0
67.5°	2458.9	1309.1	31.3	10.0	3.8	2.5	1.3	0.0	0.0	0.0	0.0
70°	2260.8	1116.0	20.1	5.0	2.5	1.3	1.3	0.0	0.0	0.0	0.0
71°	2078.9	988.1	16.3	3.8	2.5	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1712.8	726.0	12.5	3.8	1.3	1.3	0.0	0.0	0.0	0.0	0.0
75°	944.2	263.3	6.3	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	302.2	80.2	3.8	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	51.4	12.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.6	5.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	1.3	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)