

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: P214928

Luminaire Tested: **ARCH-AF24-70-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
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-T4W-7030-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5284 lumens
Efficiency: N/A
Efficacy: 71.4 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): 74
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

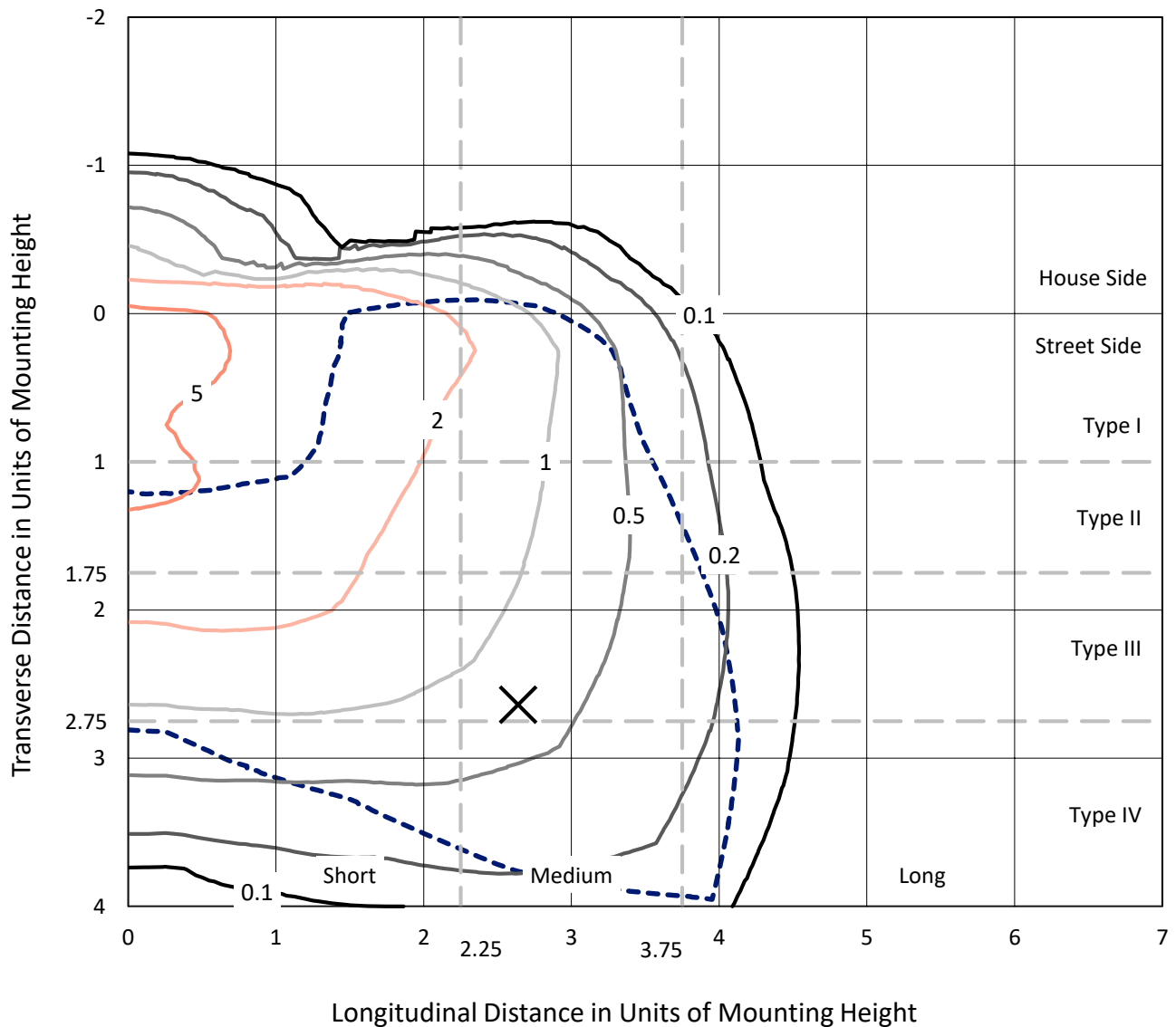


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

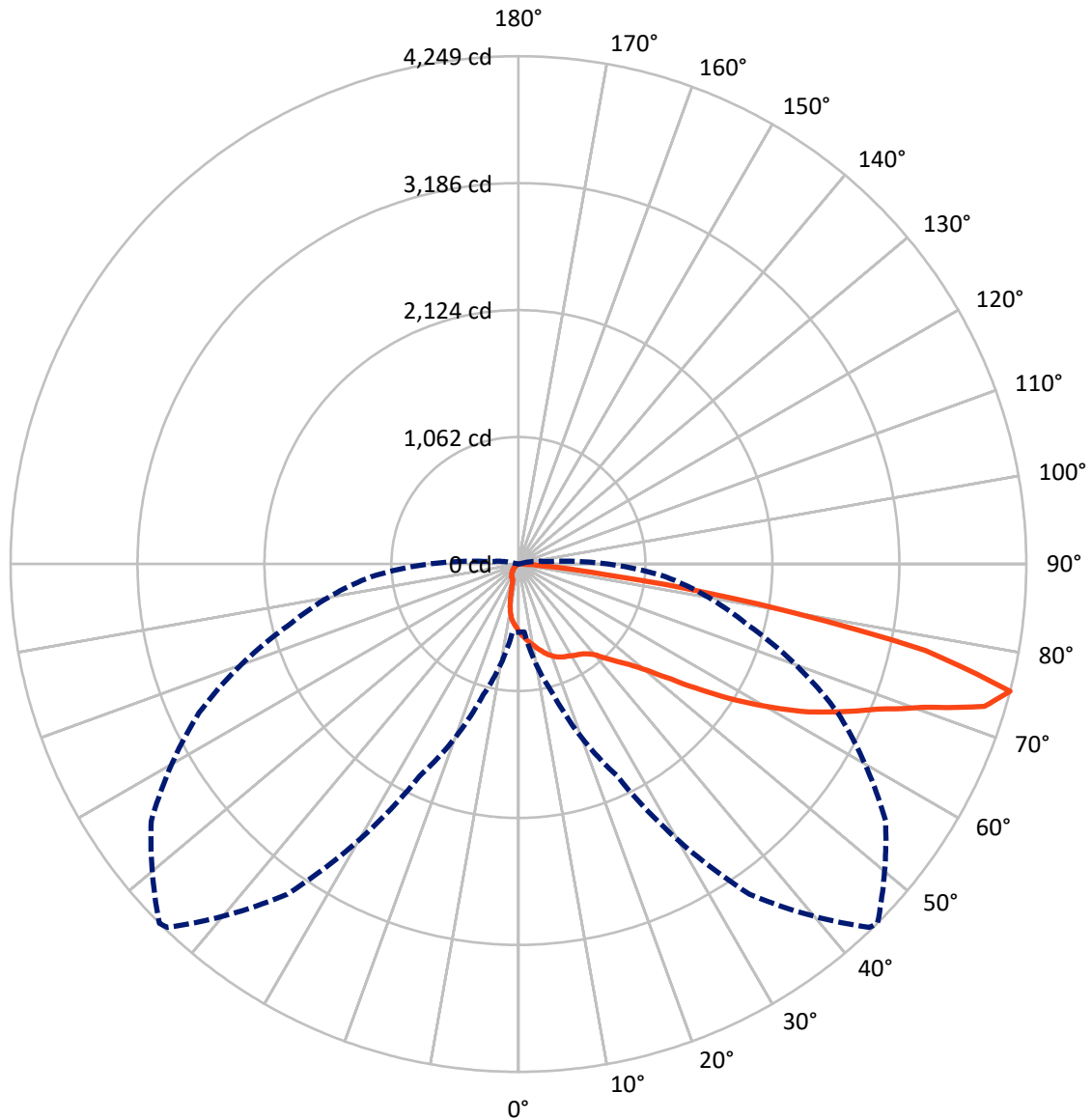


Based on 10 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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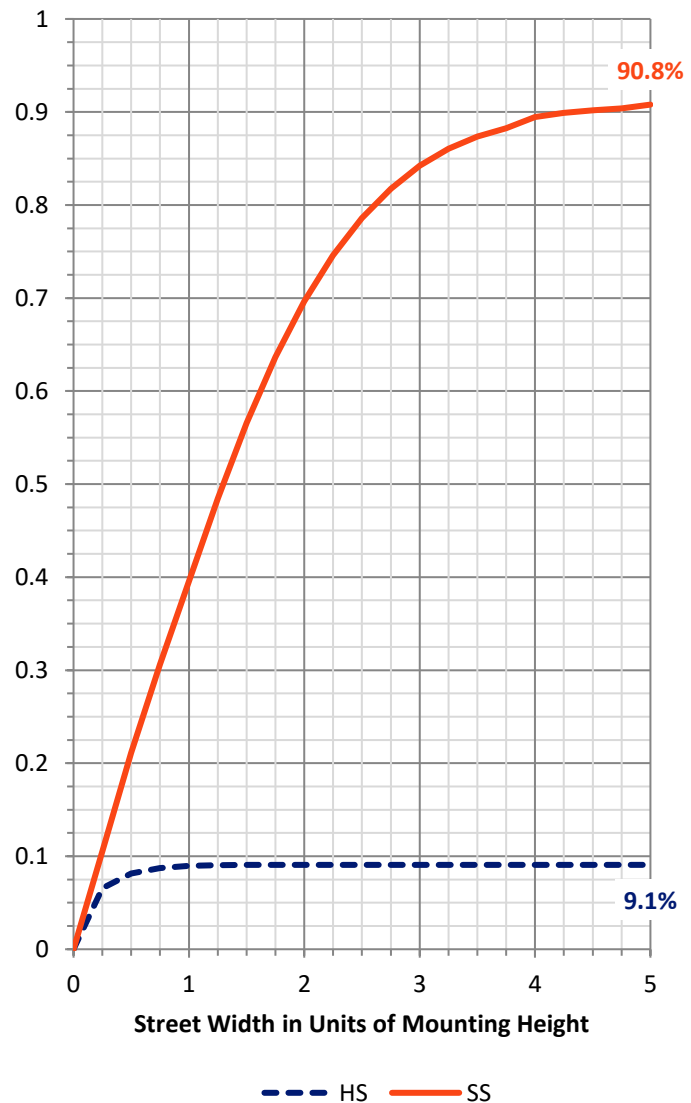
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	483.3	0.0	483.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	4800.7	0.0	4800.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	5284.0	0.0	5284.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	1.0
10°-20°	151.1	2.9
20°-30°	250.2	4.7
30°-40°	362.2	6.9
40°-50°	593.1	11.2
50°-60°	1056.7	20.0
60°-70°	1553.5	29.4
70°-80°	1172.0	22.2
80°-90°	92.0	1.7
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°	5284.0	100.0
0°-180°	5284.0	100.0



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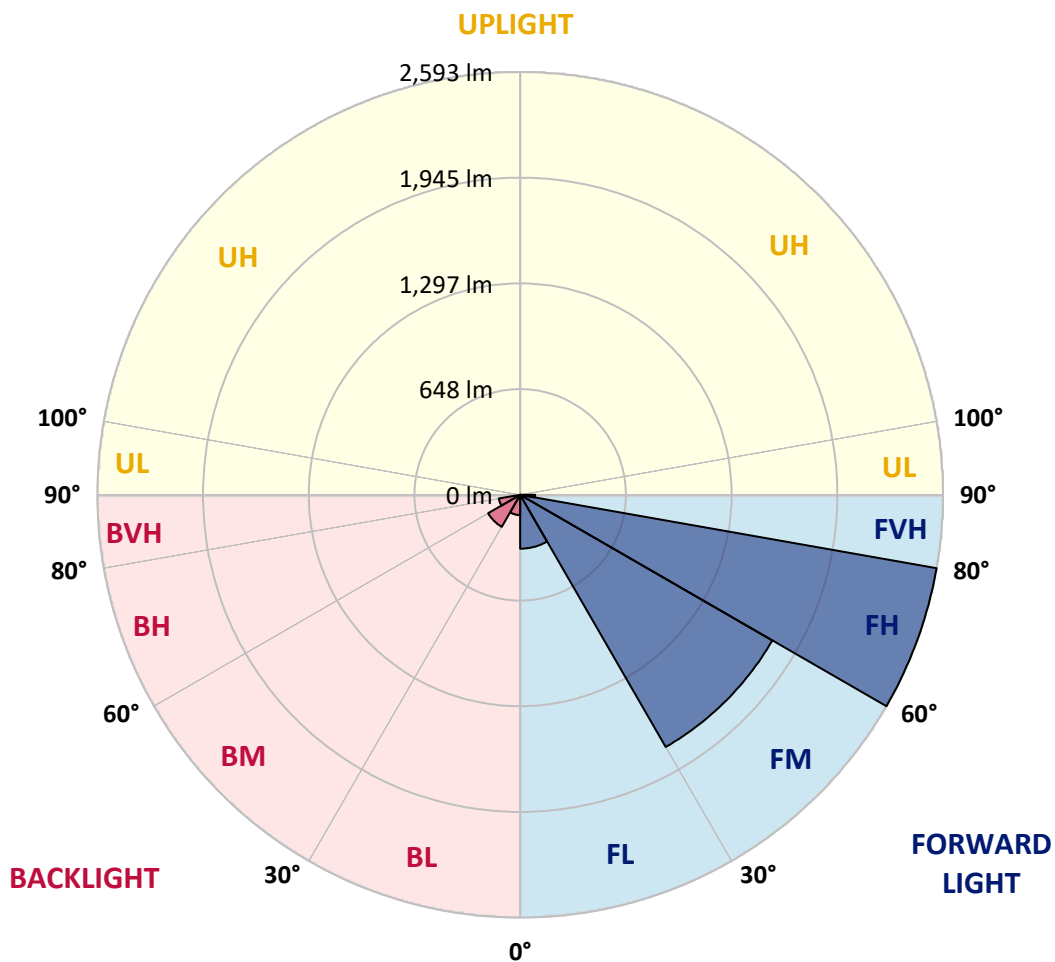
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	330.5	6.3			
FM	(30°-60°)	1785.4	33.8			
FH	(60°-80°)	2593.1	49.1			G2/5000
FVH	(80°-90°)	91.7	1.7			G1/100
BL	(0°-30°)	124.2	2.4	B1/500		
BM	(30°-60°)	226.5	4.3	B1/1000		
BH	(60°-80°)	132.4	2.5	B1/500		G1/500
BVH	(80°-90°)	0.3	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°	44°	45°	55°	65°	75°	85°
0°	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2
2.5°	613.9	613.9	612.7	611.4	605.2	598.9	597.7	593.9	582.7	575.2	567.7
5°	665.2	666.4	663.9	657.7	643.9	630.2	628.9	618.9	597.7	582.7	566.4
7.5°	713.9	716.4	710.2	698.9	682.7	662.7	661.4	642.7	615.2	593.9	570.2
10°	755.2	755.2	746.5	732.7	715.2	693.9	691.4	670.2	638.9	612.7	581.4
12.5°	800.2	799.0	786.5	767.7	747.7	727.7	726.4	700.2	670.2	636.4	597.7
15°	841.5	839.0	822.7	805.2	784.0	762.7	761.5	735.2	703.9	663.9	621.4
17.5°	864.0	862.7	847.7	830.2	812.7	796.5	795.2	767.7	733.9	692.7	645.2
20°	867.7	869.0	856.5	841.5	831.5	822.7	822.7	797.7	761.5	717.7	670.2
22.5°	869.0	872.7	864.0	844.0	841.5	842.7	845.2	825.2	787.7	746.5	696.4
25°	877.7	882.7	876.5	852.7	850.2	859.0	861.5	852.7	819.0	777.7	726.4
27.5°	895.2	900.2	895.2	865.2	861.5	870.2	872.7	877.7	852.7	807.7	757.7
30°	930.3	931.5	920.2	882.7	875.2	886.5	890.2	904.0	884.0	836.5	787.7
32.5°	991.5	979.0	945.3	895.2	889.0	901.5	905.2	920.2	912.7	864.0	819.0
35°	1116.6	1051.5	974.0	912.7	906.5	919.0	924.0	945.3	949.0	902.7	857.7
37.5°	1115.3	1056.5	1041.5	946.5	937.8	946.5	952.8	979.0	994.0	954.0	914.0
40°	1194.1	1169.1	1169.1	1010.3	981.5	994.0	1000.3	1026.5	1052.8	1021.5	980.3
42.5°	1441.6	1425.4	1407.9	1132.8	1042.8	1077.8	1081.5	1097.8	1129.1	1119.1	1070.3
45°	1718.0	1703.0	1635.4	1340.4	1147.8	1154.1	1162.8	1189.1	1234.1	1252.8	1195.3
47.5°	1934.3	1919.3	1861.8	1590.4	1311.6	1256.6	1256.6	1307.9	1377.9	1425.4	1370.4
50°	2108.1	2090.6	2055.6	1856.8	1580.4	1404.1	1396.6	1456.6	1560.4	1634.2	1596.7
52.5°	2276.9	2225.6	2204.3	2131.8	1884.3	1617.9	1597.9	1640.4	1784.2	1875.5	1844.2
55°	2389.4	2381.9	2359.4	2384.4	2203.1	1878.0	1860.5	1869.3	2049.3	2110.6	2071.8
57.5°	2494.4	2493.2	2543.2	2659.5	2550.7	2175.6	2148.1	2134.3	2305.6	2290.6	2324.4
60°	2624.5	2602.0	2718.2	2884.5	2869.5	2465.7	2434.4	2406.9	2501.9	2459.4	2627.0
62.5°	2630.7	2624.5	2860.8	3099.6	3185.9	2760.7	2724.5	2625.7	2673.2	2624.5	2915.8
65°	2391.9	2423.2	2920.8	3213.4	3450.9	3019.6	2975.8	2822.0	2825.8	2793.3	3255.9
67.5°	2338.1	2354.4	2755.7	3335.9	3642.2	3280.9	3239.6	3048.3	3003.3	3005.8	3457.2
70°	2204.3	2229.4	2550.7	3327.1	3793.5	3629.7	3588.5	3380.9	3272.1	3150.8	3302.1
72.5°	1684.2	1726.7	2149.3	2917.0	3752.3	4086.1	4074.8	3802.3	3379.7	2893.3	2498.2
75°	570.2	568.9	1129.1	1959.3	3370.9	4226.1	4248.6	3749.8	2948.3	1995.5	1240.3
77.5°	122.5	123.8	232.6	794.0	2239.4	3393.4	3479.7	2828.3	1901.8	889.0	283.8
80°	60.0	61.3	96.3	210.1	895.2	1903.0	2038.0	1454.1	702.7	177.5	47.5
82.5°	30.0	31.3	50.0	111.3	331.3	676.4	722.7	535.1	201.3	100.0	23.8
85°	11.3	11.3	25.0	66.3	151.3	158.8	195.1	155.0	121.3	81.3	6.3
87.5°	2.5	2.5	13.8	32.5	67.5	50.0	50.0	47.5	73.8	55.0	2.5
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°	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2	565.2
2.5°	563.9	558.9	550.1	541.4	535.1	527.6	523.9	520.1	518.9	517.6	520.1
5°	557.7	550.1	533.9	520.1	507.6	497.6	490.1	482.6	478.9	476.4	477.6
7.5°	557.7	546.4	522.6	501.4	481.4	460.1	438.9	422.6	410.1	402.6	403.9
10°	563.9	548.9	517.6	488.9	451.4	406.4	360.1	325.1	301.3	287.6	287.6
12.5°	577.7	557.7	518.9	473.9	410.1	331.3	261.3	218.8	201.3	191.3	192.6
15°	596.4	572.7	525.1	453.9	352.6	246.3	182.5	155.0	155.0	157.5	158.8
17.5°	617.7	591.4	530.1	423.9	278.8	176.3	143.8	141.3	145.0	151.3	151.3
20°	638.9	610.2	532.6	376.4	208.8	140.0	136.3	136.3	138.8	145.0	146.3
22.5°	665.2	633.9	530.1	317.6	156.3	132.5	131.3	131.3	131.3	138.8	138.8
25°	692.7	661.4	520.1	255.1	132.5	127.5	126.3	125.0	125.0	131.3	132.5
27.5°	723.9	690.2	496.4	195.1	125.0	122.5	121.3	118.8	118.8	123.8	123.8
30°	755.2	722.7	460.1	147.5	118.8	117.5	115.0	112.5	110.0	115.0	115.0
32.5°	789.0	756.5	412.6	117.5	110.0	110.0	108.8	105.0	102.5	105.0	106.3
35°	834.0	795.2	358.8	102.5	98.8	98.8	98.8	97.5	92.5	95.0	95.0
37.5°	894.0	849.0	296.3	95.0	90.0	87.5	87.5	87.5	83.8	85.0	85.0
40°	970.3	911.5	236.3	88.8	83.8	77.5	75.0	76.3	73.8	73.8	72.5
42.5°	1074.0	979.0	177.5	83.8	78.8	70.0	65.0	63.8	61.3	60.0	60.0
45°	1222.8	1061.5	127.5	78.8	75.0	61.3	56.3	52.5	46.3	42.5	42.5
47.5°	1415.4	1155.3	95.0	73.8	71.3	53.8	47.5	40.0	31.3	28.8	28.8
50°	1650.4	1260.3	80.0	66.3	65.0	47.5	37.5	26.3	17.5	15.0	16.3
52.5°	1879.3	1359.1	71.3	58.8	57.5	41.3	27.5	13.8	7.5	7.5	7.5
55°	2071.8	1429.1	65.0	52.5	50.0	32.5	15.0	6.3	3.8	3.8	3.8
57.5°	2245.6	1469.1	58.8	46.3	40.0	22.5	6.3	2.5	2.5	1.3	1.3
60°	2404.4	1492.9	51.3	40.0	31.3	12.5	2.5	1.3	1.3	0.0	0.0
62.5°	2560.7	1510.4	43.8	32.5	23.8	5.0	1.3	1.3	0.0	0.0	0.0
65°	2679.5	1504.2	35.0	26.3	15.0	2.5	1.3	0.0	0.0	0.0	0.0
67.5°	2675.7	1419.1	26.3	20.0	7.5	1.3	0.0	0.0	0.0	0.0	0.0
70°	2393.1	1195.3	17.5	12.5	2.5	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1698.0	766.5	11.3	7.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	747.7	232.6	6.3	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	146.3	53.8	3.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	35.0	6.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.8	1.3	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)