

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: P231337

Luminaire Tested: **ARCH-M-AF48-60-D-U-T4W-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231337
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-M-AF48-60-D-U-T4W-7030-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 405mA LIGHT ENGINES 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: 5735 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 63
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

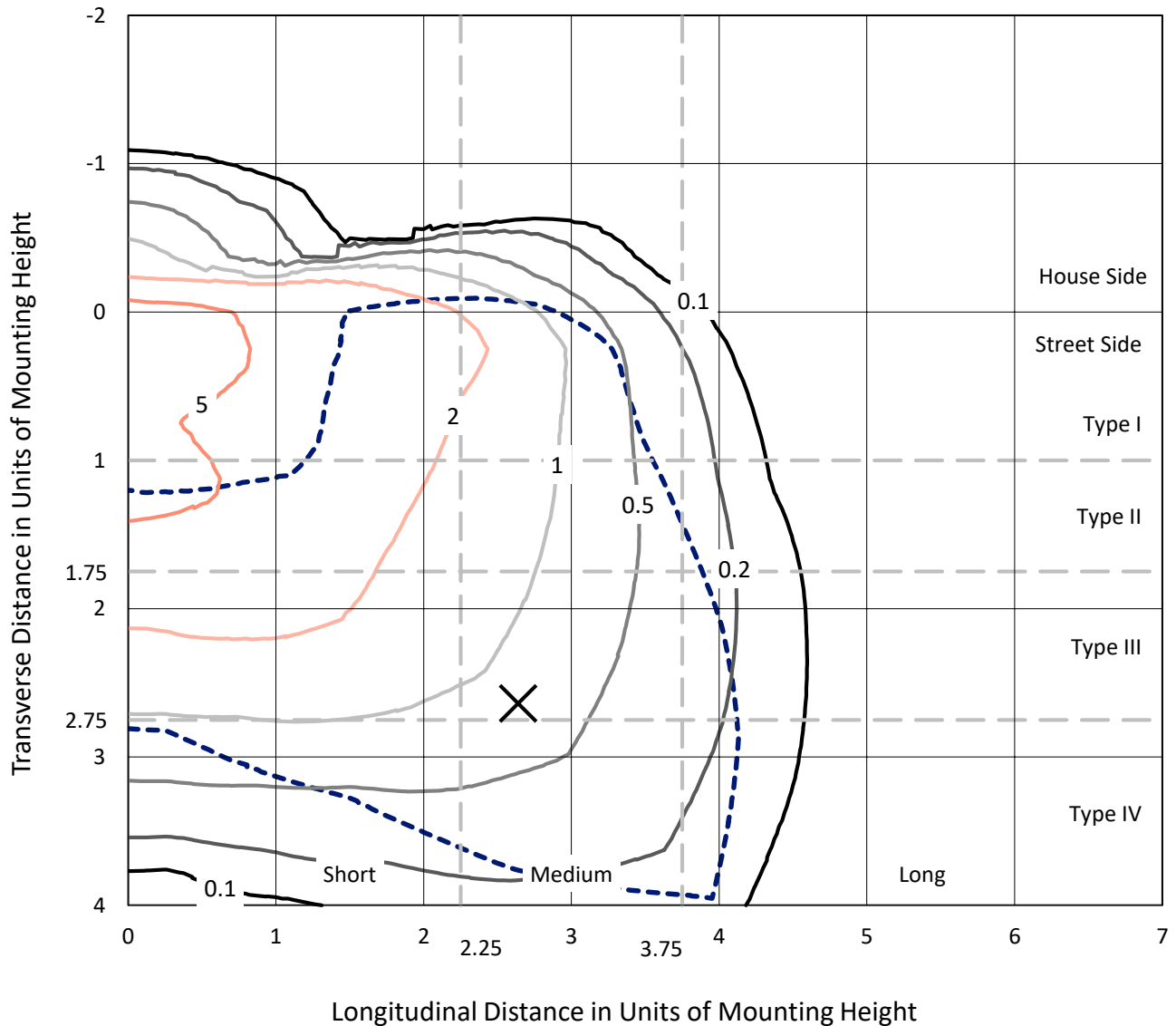


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

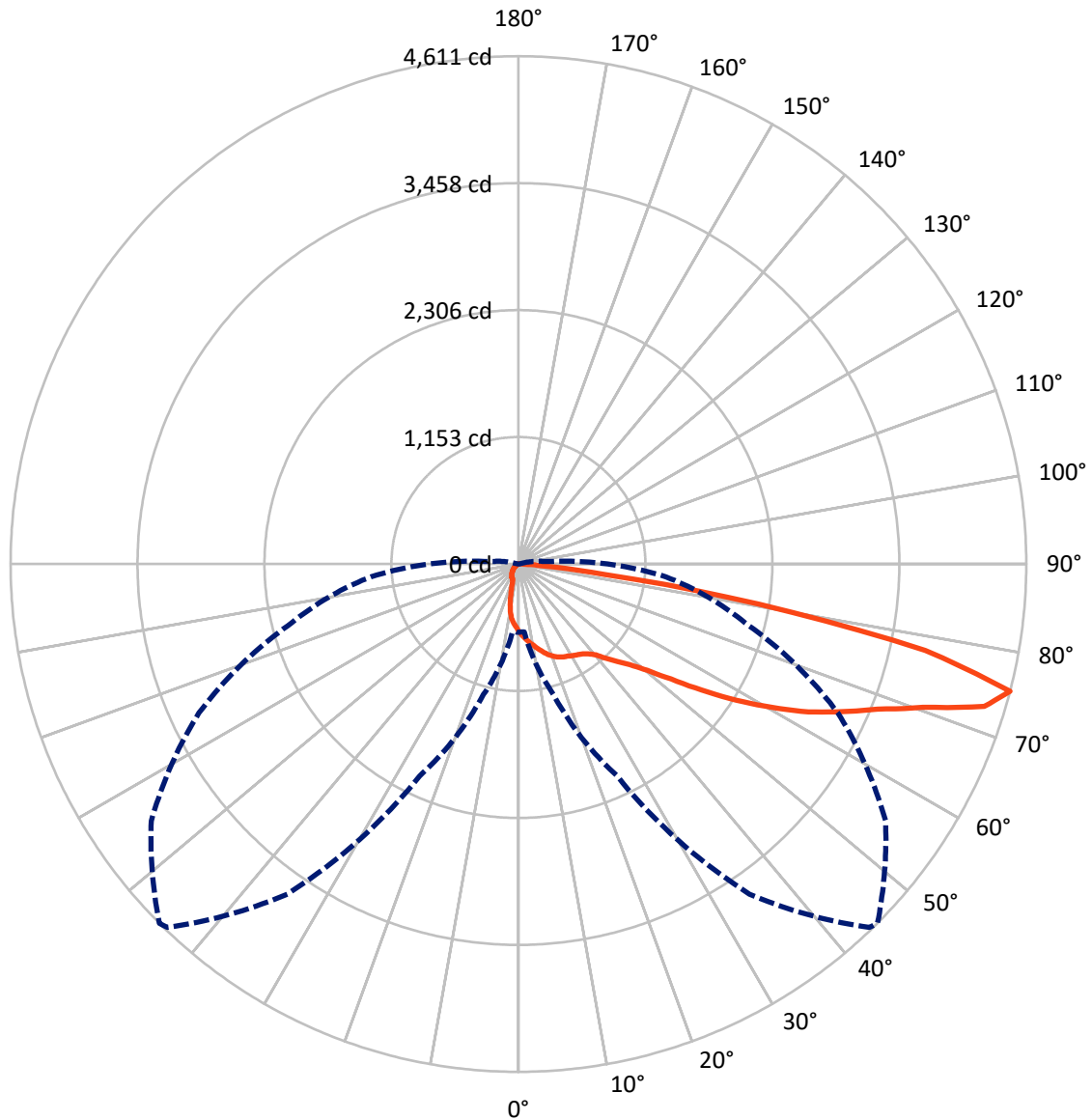


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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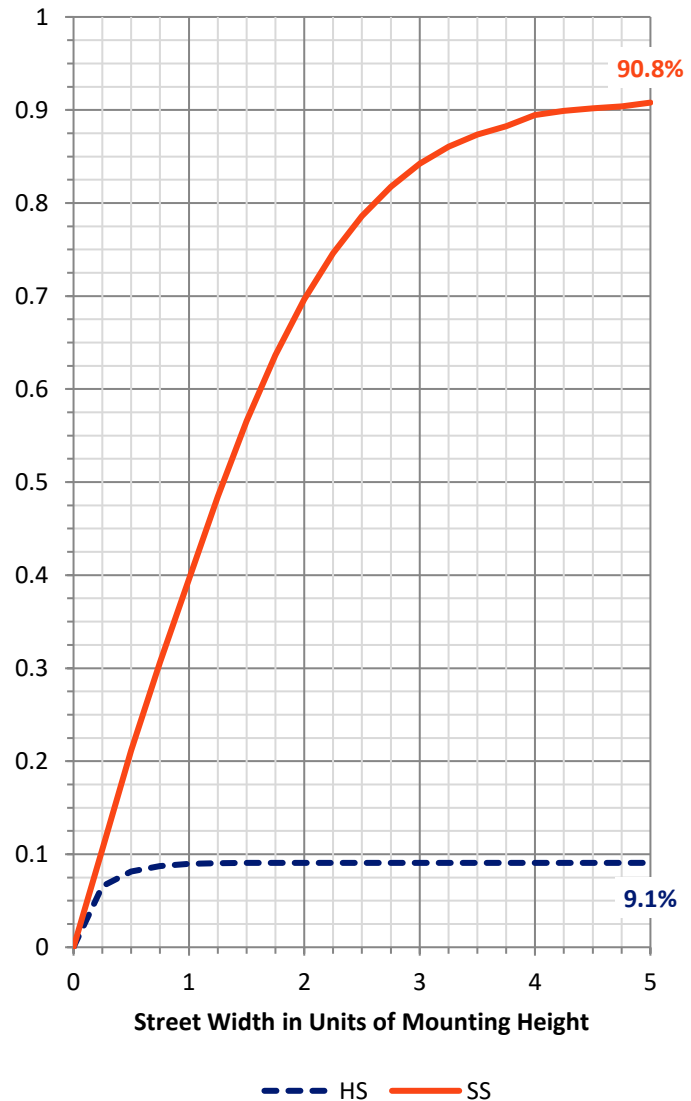
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	524.6	0.0	524.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	5210.4	0.0	5210.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	5735.0	0.0	5735.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	1.0
10°-20°	164.0	2.9
20°-30°	271.6	4.7
30°-40°	393.1	6.9
40°-50°	643.7	11.2
50°-60°	1146.9	20.0
60°-70°	1686.1	29.4
70°-80°	1272.0	22.2
80°-90°	99.8	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°	5735.0	100.0
0°-180°	5735.0	100.0



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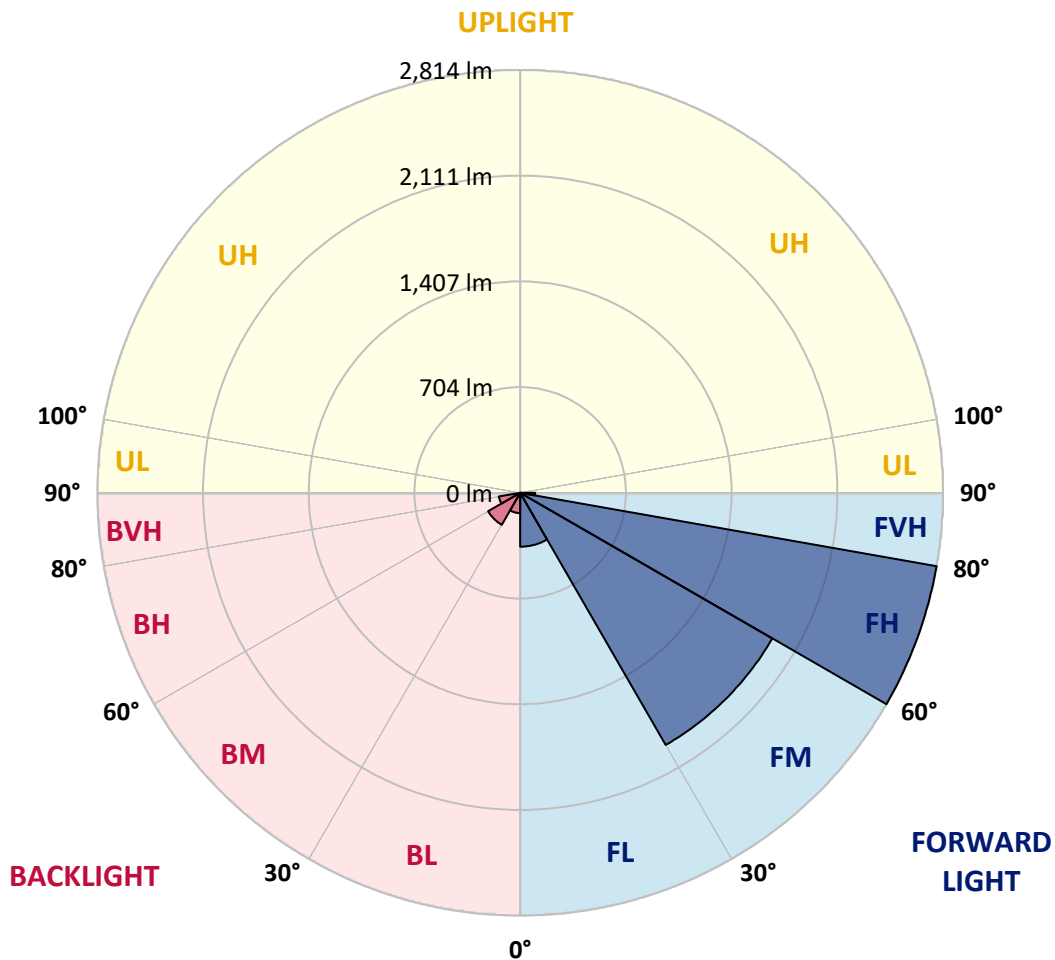
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	358.7	6.3			
FM	(30°-60°)	1937.8	33.8			
FH	(60°-80°)	2814.4	49.1			G2/5000
FVH	(80°-90°)	99.5	1.7			G1/100
BL	(0°-30°)	134.8	2.4	B1/500		
BM	(30°-60°)	245.8	4.3	B1/1000		
BH	(60°-80°)	143.7	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°	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4
2.5°	666.3	666.3	665.0	663.6	656.8	650.0	648.7	644.6	632.4	624.2	616.1
5°	722.0	723.3	720.6	713.8	698.9	684.0	682.6	671.7	648.7	632.4	614.7
7.5°	774.9	777.6	770.8	758.6	741.0	719.2	717.9	697.5	667.7	644.6	618.8
10°	819.7	819.7	810.2	795.2	776.2	753.2	750.5	727.4	693.5	665.0	631.0
12.5°	868.5	867.2	853.6	833.2	811.5	789.8	788.4	760.0	727.4	690.7	648.7
15°	913.3	910.6	892.9	873.9	850.9	827.8	826.4	797.9	764.0	720.6	674.5
17.5°	937.7	936.4	920.1	901.1	882.1	864.4	863.1	833.2	796.6	751.8	700.2
20°	941.8	943.2	929.6	913.3	902.4	892.9	892.9	865.8	826.4	779.0	727.4
22.5°	943.2	947.2	937.7	916.0	913.3	914.7	917.4	895.7	854.9	810.2	755.9
25°	952.7	958.1	951.3	925.5	922.8	932.3	935.0	925.5	888.9	844.1	788.4
27.5°	971.7	977.1	971.7	939.1	935.0	944.5	947.2	952.7	925.5	876.7	822.4
30°	1009.6	1011.0	998.8	958.1	949.9	962.2	966.2	981.2	959.4	907.9	854.9
32.5°	1076.1	1062.6	1025.9	971.7	964.9	978.4	982.5	998.8	990.7	937.7	888.9
35°	1211.9	1141.3	1057.1	990.7	983.9	997.4	1002.9	1025.9	1030.0	979.8	930.9
37.5°	1210.5	1146.7	1130.4	1027.3	1017.8	1027.3	1034.1	1062.6	1078.9	1035.4	992.0
40°	1296.0	1268.8	1268.8	1096.5	1065.3	1078.9	1085.6	1114.1	1142.6	1108.7	1063.9
42.5°	1564.7	1547.0	1528.0	1229.5	1131.8	1169.8	1173.9	1191.5	1225.4	1214.6	1161.6
45°	1864.6	1848.3	1775.0	1454.8	1245.8	1252.6	1262.1	1290.6	1339.4	1359.8	1297.3
47.5°	2099.4	2083.1	2020.7	1726.2	1423.6	1363.8	1363.8	1419.5	1495.5	1547.0	1487.3
50°	2288.0	2269.0	2231.0	2015.2	1715.3	1524.0	1515.8	1581.0	1693.6	1773.7	1733.0
52.5°	2471.2	2415.6	2392.5	2313.8	2045.1	1756.0	1734.3	1780.5	1936.5	2035.6	2001.7
55°	2593.3	2585.2	2560.8	2587.9	2391.1	2038.3	2019.3	2028.8	2224.2	2290.7	2248.6
57.5°	2707.3	2706.0	2760.3	2886.5	2768.4	2361.3	2331.4	2316.5	2502.4	2486.1	2522.8
60°	2848.5	2824.0	2950.2	3130.7	3114.4	2676.1	2642.2	2612.3	2715.5	2669.3	2851.2
62.5°	2855.2	2848.5	3104.9	3364.1	3457.8	2996.4	2957.0	2849.8	2901.4	2848.5	3164.7
65°	2596.0	2630.0	3170.1	3487.6	3745.5	3277.3	3229.8	3062.9	3066.9	3031.7	3533.8
67.5°	2537.7	2555.3	2991.0	3620.6	3953.1	3560.9	3516.1	3308.5	3259.6	3262.4	3752.3
70°	2392.5	2419.6	2768.4	3611.1	4117.3	3939.5	3894.8	3669.5	3551.4	3419.8	3584.0
72.5°	1828.0	1874.1	2332.8	3166.0	4072.5	4434.9	4422.6	4126.8	3668.1	3140.2	2711.4
75°	618.8	617.5	1225.4	2126.5	3658.6	4586.8	4611.3	4069.8	3199.9	2165.9	1346.2
77.5°	133.0	134.3	252.4	861.7	2430.5	3683.1	3776.7	3069.7	2064.1	964.9	308.1
80°	65.1	66.5	104.5	228.0	971.7	2065.4	2212.0	1578.3	762.7	192.7	51.6
82.5°	32.6	33.9	54.3	120.8	359.6	734.2	784.4	580.8	218.5	108.6	25.8
85°	12.2	12.2	27.1	71.9	164.2	172.3	211.7	168.3	131.6	88.2	6.8
87.5°	2.7	2.7	14.9	35.3	73.3	54.3	54.3	51.6	80.1	59.7	2.7
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°	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4	613.4
2.5°	612.0	606.6	597.1	587.6	580.8	572.7	568.6	564.5	563.2	561.8	564.5
5°	605.2	597.1	579.5	564.5	551.0	540.1	532.0	523.8	519.8	517.0	518.4
7.5°	605.2	593.0	567.2	544.2	522.5	499.4	476.3	458.7	445.1	437.0	438.3
10°	612.0	595.7	561.8	530.6	489.9	441.0	390.8	352.8	327.1	312.1	312.1
12.5°	627.0	605.2	563.2	514.3	445.1	359.6	283.6	237.5	218.5	207.6	209.0
15°	647.3	621.5	570.0	492.6	382.7	267.3	198.1	168.3	168.3	171.0	172.3
17.5°	670.4	641.9	575.4	460.0	302.6	191.3	156.1	153.3	157.4	164.2	164.2
20°	693.5	662.2	578.1	408.5	226.6	152.0	147.9	147.9	150.6	157.4	158.8
22.5°	722.0	688.0	575.4	344.7	169.6	143.8	142.5	142.5	142.5	150.6	150.6
25°	751.8	717.9	564.5	276.8	143.8	138.4	137.1	135.7	135.7	142.5	143.8
27.5°	785.7	749.1	538.8	211.7	135.7	133.0	131.6	128.9	128.9	134.3	134.3
30°	819.7	784.4	499.4	160.1	128.9	127.6	124.8	122.1	119.4	124.8	124.8
32.5°	856.3	821.0	447.8	127.6	119.4	119.4	118.1	114.0	111.3	114.0	115.3
35°	905.2	863.1	389.5	111.3	107.2	107.2	107.2	105.9	100.4	103.1	103.1
37.5°	970.3	921.4	321.6	103.1	97.7	95.0	95.0	95.0	90.9	92.3	92.3
40°	1053.1	989.3	256.5	96.4	90.9	84.1	81.4	82.8	80.1	80.1	78.7
42.5°	1165.7	1062.6	192.7	90.9	85.5	76.0	70.6	69.2	66.5	65.1	65.1
45°	1327.2	1152.1	138.4	85.5	81.4	66.5	61.1	57.0	50.2	46.1	46.1
47.5°	1536.2	1253.9	103.1	80.1	77.4	58.4	51.6	43.4	33.9	31.2	31.2
50°	1791.3	1367.9	86.9	71.9	70.6	51.6	40.7	28.5	19.0	16.3	17.6
52.5°	2039.7	1475.1	77.4	63.8	62.4	44.8	29.9	14.9	8.1	8.1	8.1
55°	2248.6	1551.1	70.6	57.0	54.3	35.3	16.3	6.8	4.1	4.1	4.1
57.5°	2437.3	1594.5	63.8	50.2	43.4	24.4	6.8	2.7	2.7	1.4	1.4
60°	2609.6	1620.3	55.6	43.4	33.9	13.6	2.7	1.4	1.4	0.0	0.0
62.5°	2779.3	1639.3	47.5	35.3	25.8	5.4	1.4	1.4	0.0	0.0	0.0
65°	2908.2	1632.5	38.0	28.5	16.3	2.7	1.4	0.0	0.0	0.0	0.0
67.5°	2904.1	1540.3	28.5	21.7	8.1	1.4	0.0	0.0	0.0	0.0	0.0
70°	2597.4	1297.3	19.0	13.6	2.7	1.4	0.0	0.0	0.0	0.0	0.0
72.5°	1842.9	831.9	12.2	8.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	811.5	252.4	6.8	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	158.8	58.4	4.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	38.0	6.8	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	1.4	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)