

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: P265775

Luminaire Tested: **ARCH-M-AF48-60-D-U-T3-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265775
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-M-AF48-60-D-U-T3-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 405mA LIGHT ENGINES 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: 5697.4 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 63
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

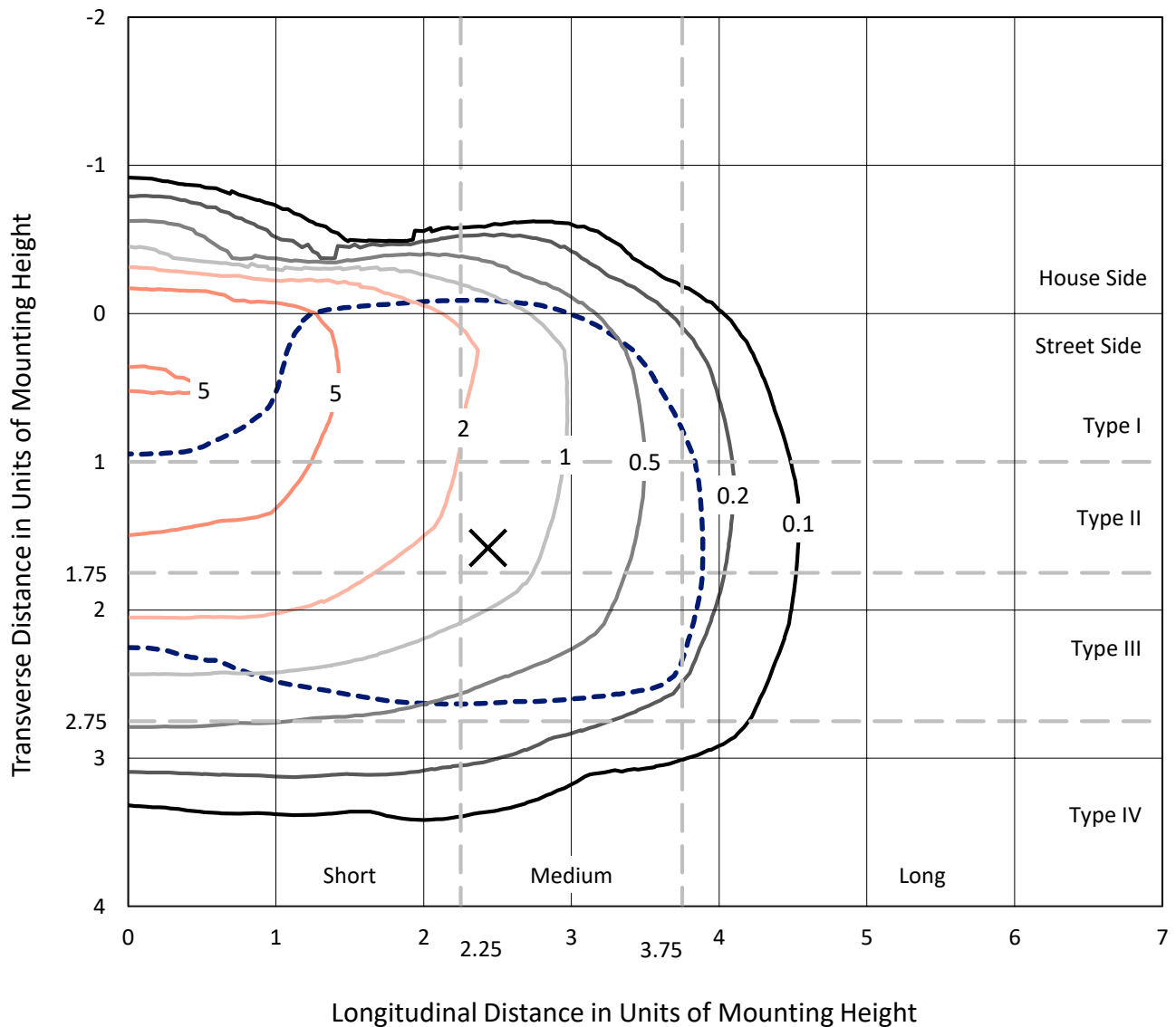


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

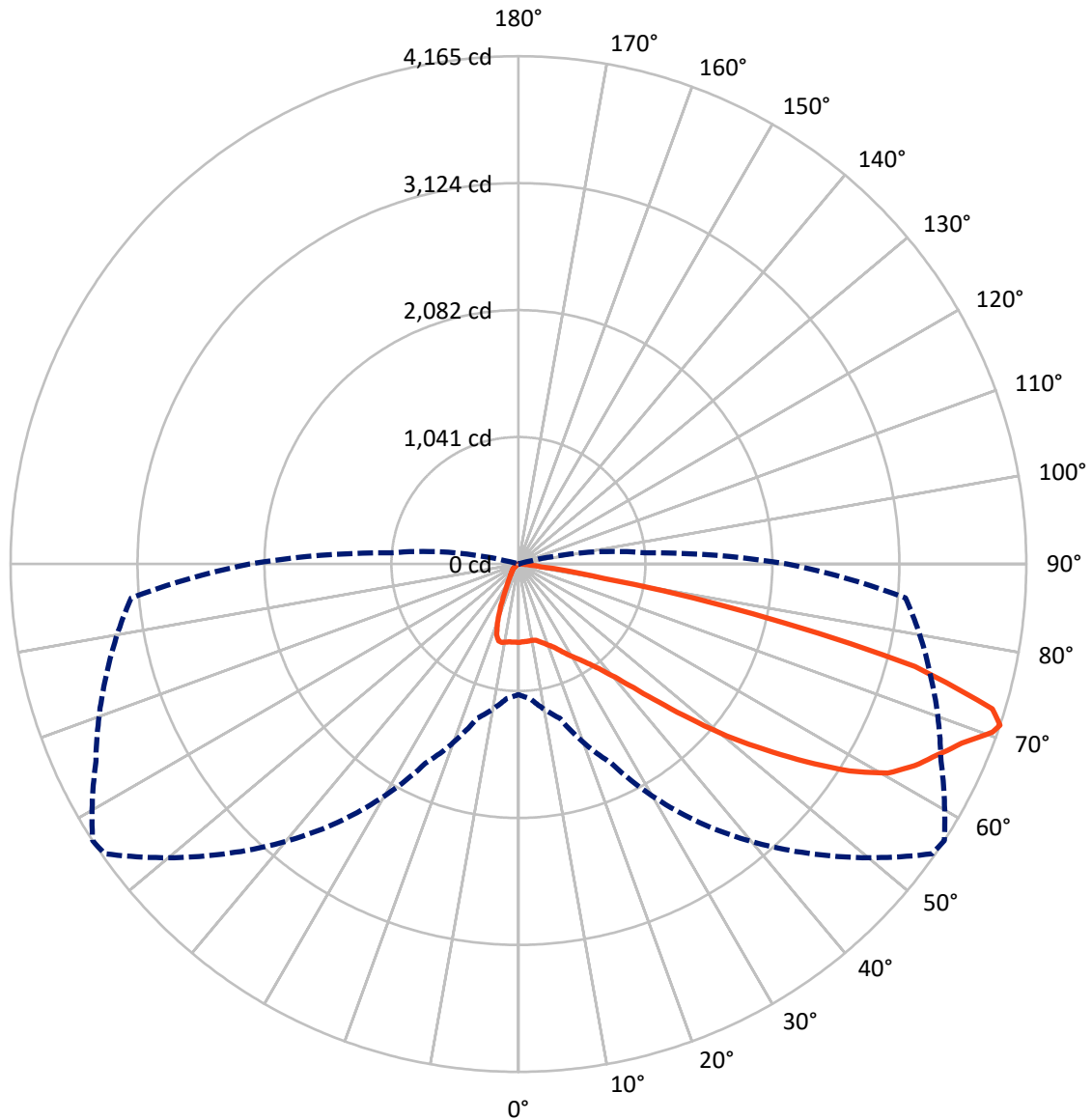


Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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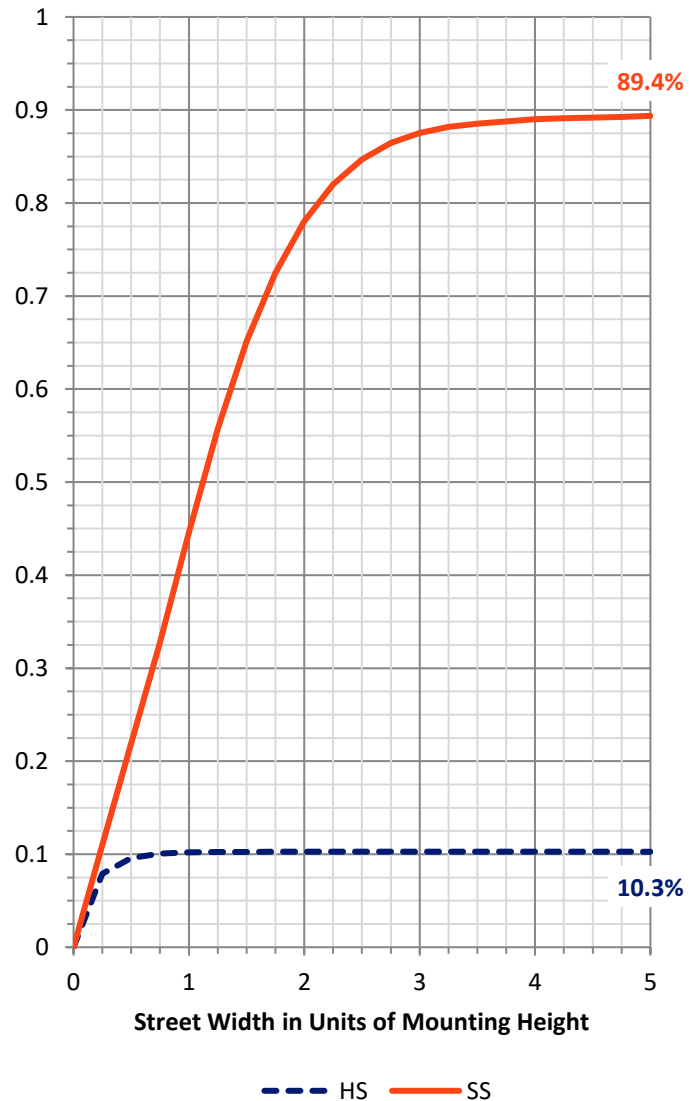
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	590.4	0.0	590.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	5107.0	0.0	5107.0
	% Fixture	89.6	0.0	89.6
Total	Lumens	5697.4	0.0	5697.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.5	1.1
10°-20°	161.7	2.8
20°-30°	252.2	4.4
30°-40°	426.3	7.5
40°-50°	828.0	14.5
50°-60°	1390.5	24.4
60°-70°	1659.4	29.1
70°-80°	874.5	15.3
80°-90°	44.4	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°	5697.4	100.0
0°-180°	5697.4	100.0

Coefficient of Utilization



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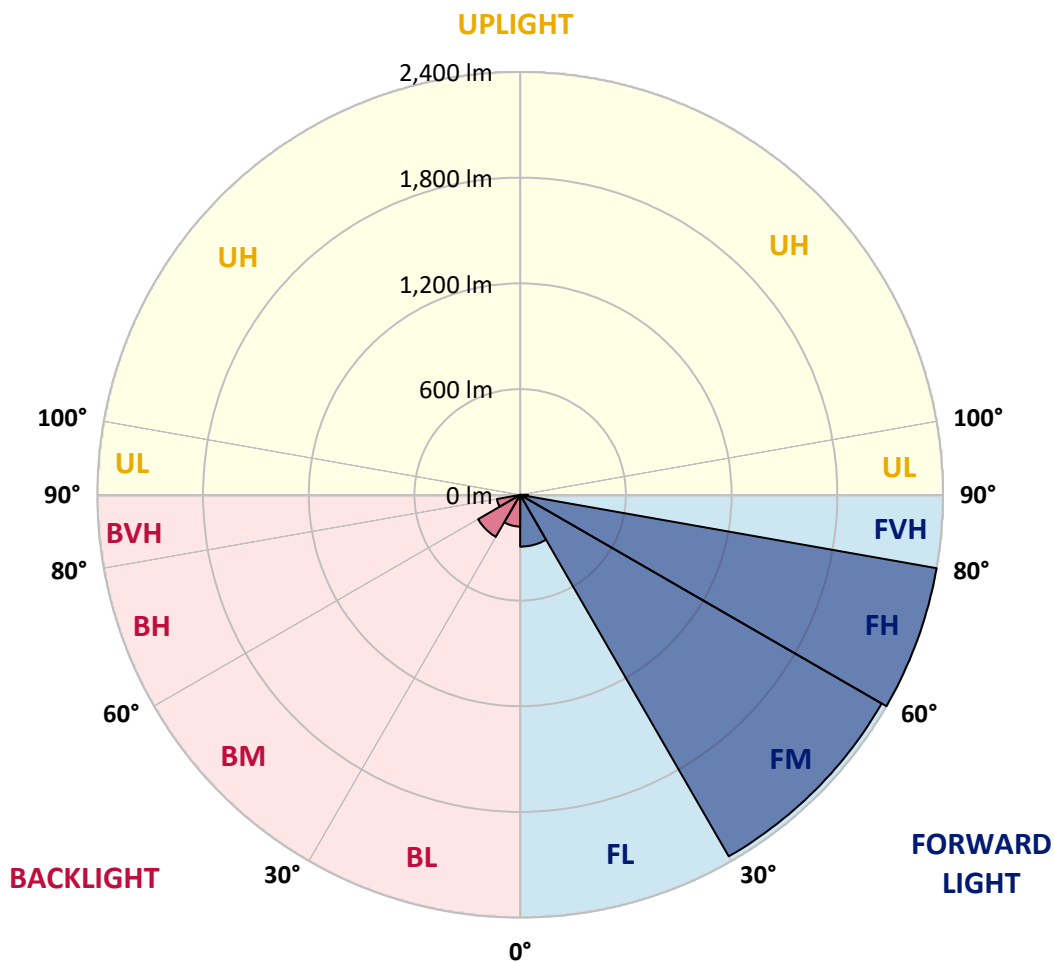
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	294.2	5.2			
FM	(30°-60°)	2369.1	41.6			
FH	(60°-80°)	2399.8	42.1			G2/5000
FVH	(80°-90°)	44.0	0.8			G1/100
BL	(0°-30°)	180.2	3.2	B1/500		
BM	(30°-60°)	275.7	4.8	B1/1000		
BH	(60°-80°)	134.1	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°	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9
2.5°	634.7	634.7	634.7	635.9	637.3	637.3	640.0	638.5	638.5	638.5	641.2
5°	617.3	618.8	620.0	622.6	627.9	632.0	638.5	638.5	640.0	642.6	643.9
7.5°	593.5	594.8	598.8	604.1	614.7	624.1	634.7	637.3	641.2	647.9	650.6
10°	578.9	581.6	586.9	593.5	605.4	617.3	630.6	634.7	646.6	658.5	665.1
12.5°	574.8	576.3	581.6	592.2	606.7	621.4	638.5	642.6	659.9	678.4	689.0
15°	581.6	582.8	585.4	597.5	614.7	633.2	655.9	661.2	682.4	703.6	716.9
17.5°	593.5	593.5	596.1	606.7	625.3	646.6	675.7	683.7	707.7	731.5	746.1
20°	601.4	601.4	605.4	616.0	637.3	665.1	699.7	710.3	736.8	763.4	776.7
22.5°	609.4	610.7	614.7	626.7	650.6	689.0	728.9	739.5	770.0	798.0	811.2
25°	632.0	630.6	632.0	642.6	670.5	718.3	768.7	782.0	813.9	844.3	851.1
27.5°	694.4	691.6	674.4	667.8	689.0	748.7	819.2	832.4	869.6	900.1	900.1
30°	837.7	832.4	789.9	735.5	718.3	776.7	867.0	885.5	933.2	959.8	951.9
32.5°	1019.7	1007.7	953.2	860.2	791.2	813.9	917.3	938.5	999.8	1022.4	1005.1
35°	1218.8	1217.5	1149.7	1030.3	932.0	890.8	982.4	1007.7	1084.7	1104.6	1076.7
37.5°	1429.8	1435.2	1390.0	1225.4	1109.9	1017.1	1068.8	1098.0	1192.2	1216.1	1189.5
40°	1664.9	1663.5	1646.2	1451.1	1323.7	1196.3	1193.6	1220.1	1334.3	1371.4	1334.3
42.5°	1962.3	1959.7	1897.2	1722.0	1582.5	1429.8	1375.5	1384.7	1512.1	1573.2	1518.9
45°	2264.9	2246.3	2174.6	2023.3	1899.8	1719.3	1615.7	1615.7	1724.6	1808.3	1723.3
47.5°	2433.6	2415.0	2385.8	2302.1	2264.9	2063.1	1910.4	1891.9	1976.9	2061.8	1942.3
50°	2655.3	2655.3	2582.3	2550.4	2614.1	2472.0	2235.7	2217.1	2258.2	2326.0	2169.3
52.5°	2830.5	2798.7	2746.8	2774.8	2956.6	2891.6	2561.0	2525.1	2557.0	2574.4	2367.2
55°	2903.5	2873.0	2869.0	2971.2	3252.8	3162.5	2894.2	2862.4	2859.8	2774.8	2539.8
57.5°	2918.1	2891.6	2942.0	3121.3	3540.8	3384.2	3226.2	3202.3	3127.9	2915.4	2716.4
60°	2794.6	2807.9	2930.1	3203.5	3710.8	3576.6	3506.3	3481.0	3309.7	3035.0	2912.8
62.5°	2541.0	2572.9	2801.4	3211.5	3648.3	3654.9	3661.6	3644.3	3450.5	3143.9	3110.7
65°	2241.0	2250.3	2525.1	3101.4	3539.5	3631.0	3775.8	3774.5	3558.0	3266.0	3333.7
67.5°	1846.7	1862.6	2100.3	2729.6	3321.8	3620.4	3925.9	3921.8	3680.1	3405.4	3466.5
70°	1374.0	1394.0	1586.5	2122.9	2835.8	3487.7	4122.3	4124.9	3809.1	3511.7	3374.8
71°	1071.4	1107.3	1309.0	1802.9	2587.6	3353.6	4140.8	4164.8	3823.5	3497.0	3186.3
72.5°	525.8	568.2	821.8	1269.2	2129.5	3053.6	4018.7	4065.2	3732.0	3315.1	2724.3
75°	136.7	144.6	245.5	519.1	1141.7	2023.3	3240.7	3358.9	3051.0	2523.9	1664.9
77.5°	86.2	88.9	115.5	201.8	427.6	768.7	1903.9	1962.3	1743.3	1278.5	586.9
80°	61.1	62.4	73.0	130.2	249.5	224.3	685.0	710.3	630.6	338.5	104.9
82.5°	37.2	37.2	53.1	83.6	154.0	122.1	180.6	192.4	169.9	94.2	34.6
85°	21.2	22.5	33.1	57.1	73.0	59.7	67.7	71.7	73.0	62.4	14.6
87.5°	17.2	18.5	29.3	47.8	39.9	29.3	29.3	30.5	31.9	37.2	6.6
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°	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9
2.5°	641.2	641.2	642.6	641.2	641.2	641.2	642.6	642.6	642.6	645.3	646.6
5°	643.9	643.9	643.9	642.6	641.2	641.2	643.9	645.3	645.3	649.3	649.3
7.5°	650.6	650.6	647.9	645.3	642.6	638.5	640.0	641.2	640.0	641.2	641.2
10°	665.1	665.1	661.2	655.9	647.9	635.9	620.0	600.1	581.6	574.8	572.2
12.5°	689.0	687.7	679.7	670.5	653.2	612.0	552.3	481.9	423.6	407.7	402.4
15°	715.6	713.0	703.6	687.7	641.2	532.3	407.7	317.3	261.5	248.3	245.5
17.5°	743.4	739.5	726.2	694.4	586.9	395.7	262.8	199.2	168.6	165.9	167.3
20°	772.7	767.4	748.7	681.0	473.9	264.2	169.9	154.0	151.4	151.4	152.7
22.5°	805.9	799.2	774.0	633.2	345.2	175.3	146.1	144.6	143.4	142.0	142.0
25°	844.3	836.4	798.0	547.0	237.6	143.4	139.3	135.5	132.8	130.2	128.7
27.5°	890.8	880.2	816.5	440.8	163.3	134.0	131.4	124.9	119.5	114.2	114.2
30°	937.3	924.0	811.2	332.0	132.8	124.9	119.5	111.5	103.6	98.3	96.8
32.5°	986.3	973.1	776.7	223.0	120.8	114.2	107.5	95.6	86.2	79.7	78.3
35°	1059.5	1048.9	708.9	147.3	108.9	100.9	91.5	79.7	67.7	61.1	59.7
37.5°	1168.3	1155.0	625.3	112.8	95.6	83.6	75.6	62.4	50.5	43.7	42.5
40°	1314.4	1274.5	525.8	99.6	83.6	69.0	58.4	45.2	35.8	31.9	31.9
42.5°	1484.3	1390.0	418.3	90.3	74.4	57.1	42.5	30.5	25.2	23.9	23.9
45°	1664.9	1497.6	310.6	83.6	65.0	45.2	30.5	21.2	18.5	17.2	17.2
47.5°	1850.7	1585.1	216.4	75.6	54.4	34.6	21.2	15.9	13.2	11.9	11.9
50°	2024.6	1642.3	152.7	67.7	46.4	25.2	15.9	11.9	9.3	9.3	9.3
52.5°	2145.4	1637.0	110.2	58.4	35.8	17.2	10.6	7.9	7.9	7.9	7.9
55°	2251.7	1617.0	86.2	50.5	27.8	11.9	7.9	6.6	6.6	5.3	5.3
57.5°	2341.9	1585.1	73.0	41.1	19.9	9.3	5.3	5.3	4.0	4.0	4.0
60°	2419.0	1545.4	61.1	34.6	13.2	6.6	4.0	2.6	2.6	1.3	2.6
62.5°	2523.9	1520.1	53.1	26.6	9.3	4.0	2.6	1.3	1.3	0.0	0.0
65°	2600.9	1472.3	45.2	18.5	5.3	2.6	1.3	1.3	0.0	0.0	0.0
67.5°	2603.5	1386.1	33.1	10.6	4.0	2.6	1.3	0.0	0.0	0.0	0.0
70°	2393.8	1181.6	21.2	5.3	2.6	1.3	1.3	0.0	0.0	0.0	0.0
71°	2201.2	1046.2	17.2	4.0	2.6	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1813.6	768.7	13.2	4.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0
75°	999.8	278.8	6.6	2.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	319.9	85.0	4.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	54.4	13.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.5	5.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	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)