

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: P265780

Luminaire Tested: **ARCH-M-AF48-70-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-70-D-U-T2R-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 470mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7045 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 73
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

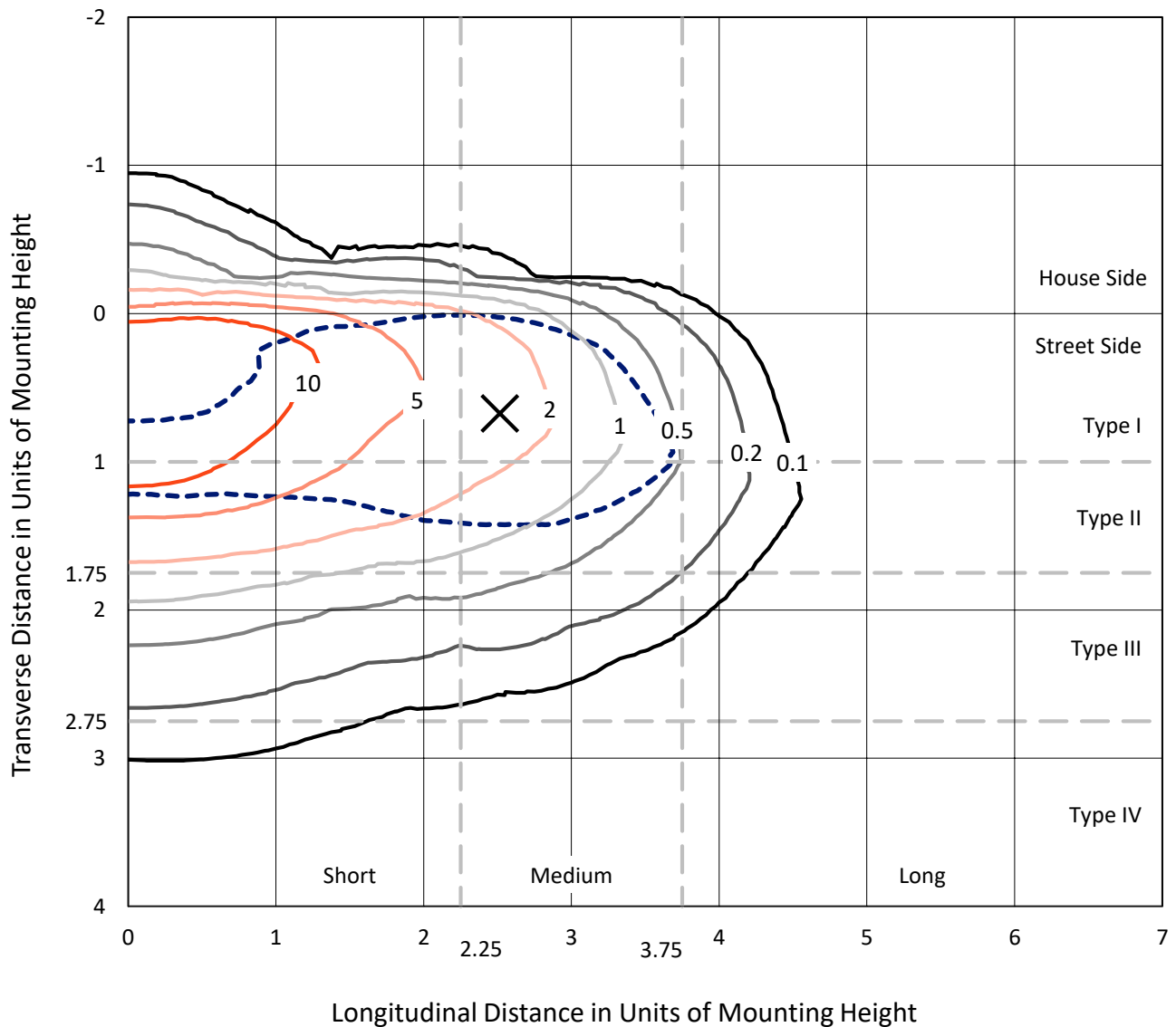


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

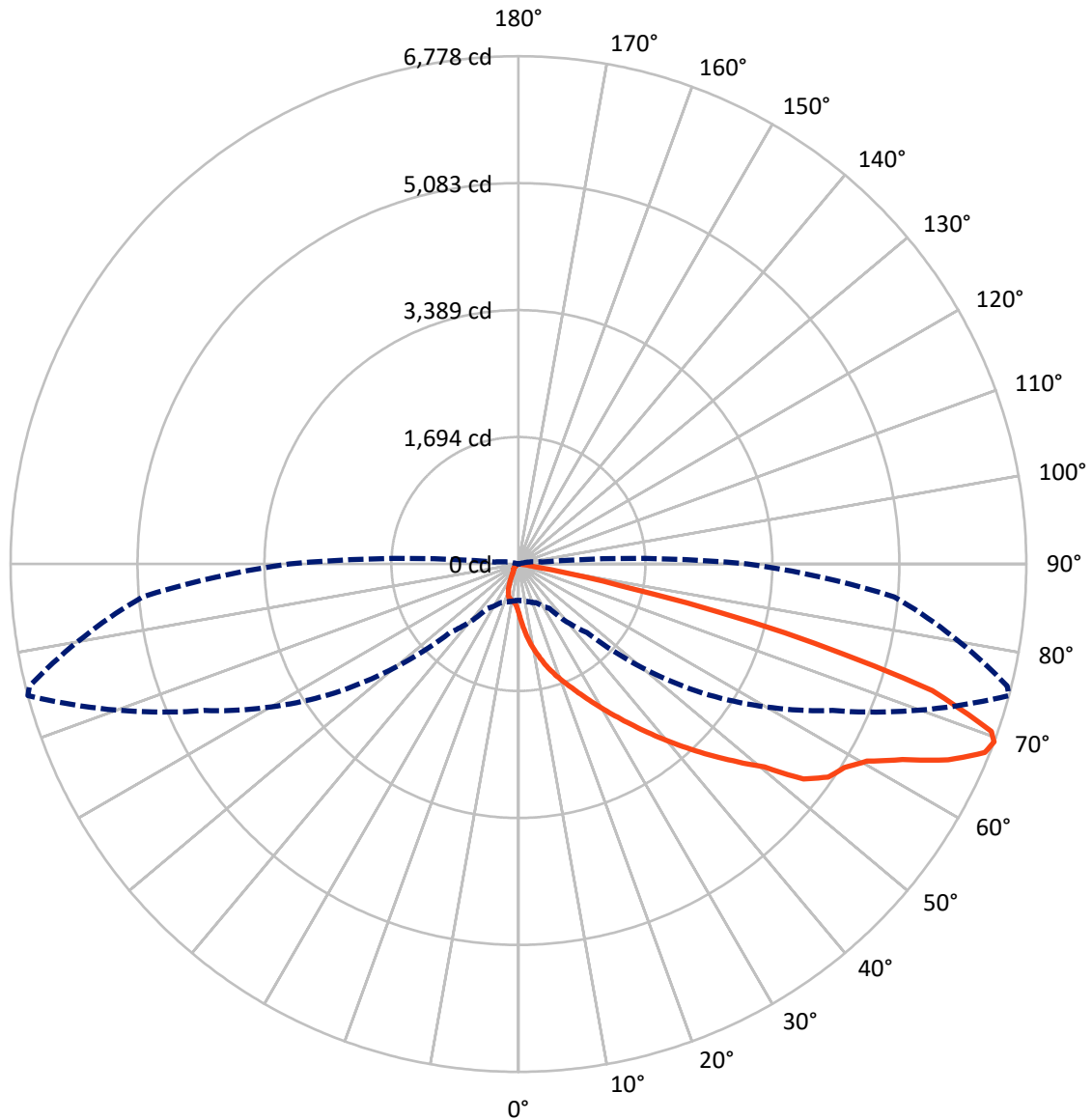


Based on 10 foot mounting height. Maximum calculated value = 17.9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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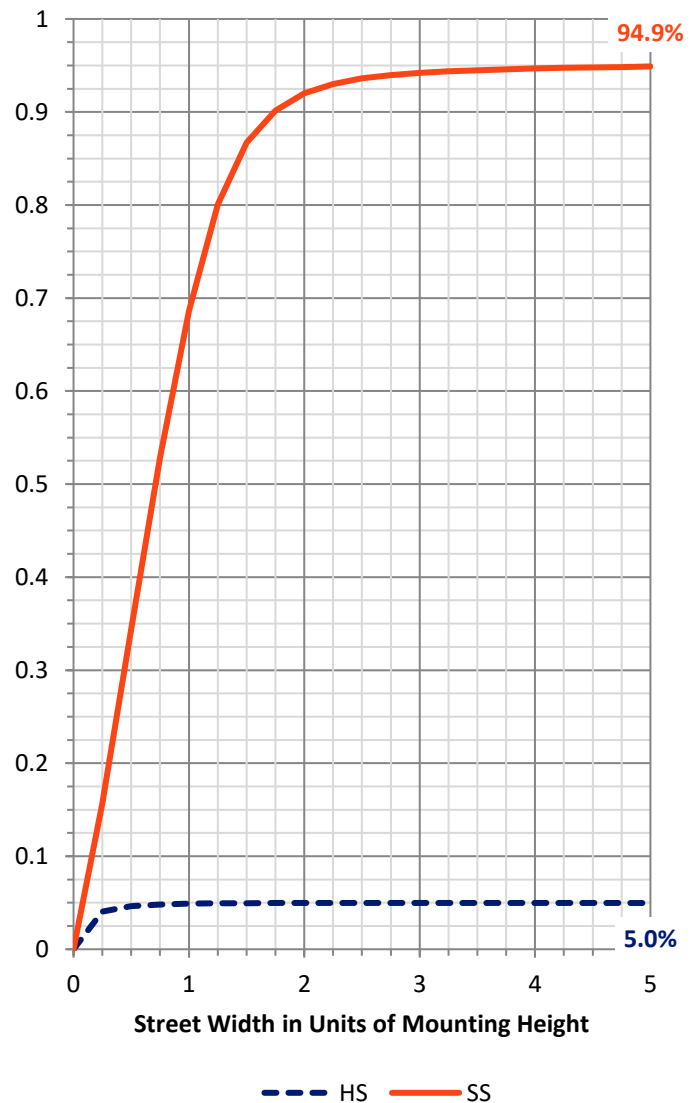
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	351.4	0.0	351.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	6693.6	0.0	6693.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	7045.0	0.0	7045.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	1.1
10°-20°	273.3	3.9
20°-30°	521.7	7.4
30°-40°	935.8	13.3
40°-50°	1433.8	20.4
50°-60°	1666.4	23.7
60°-70°	1475.6	20.9
70°-80°	636.5	9.0
80°-90°	25.5	0.4
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°	7045.0	100.0
0°-180°	7045.0	100.0

Coefficient of Utilization



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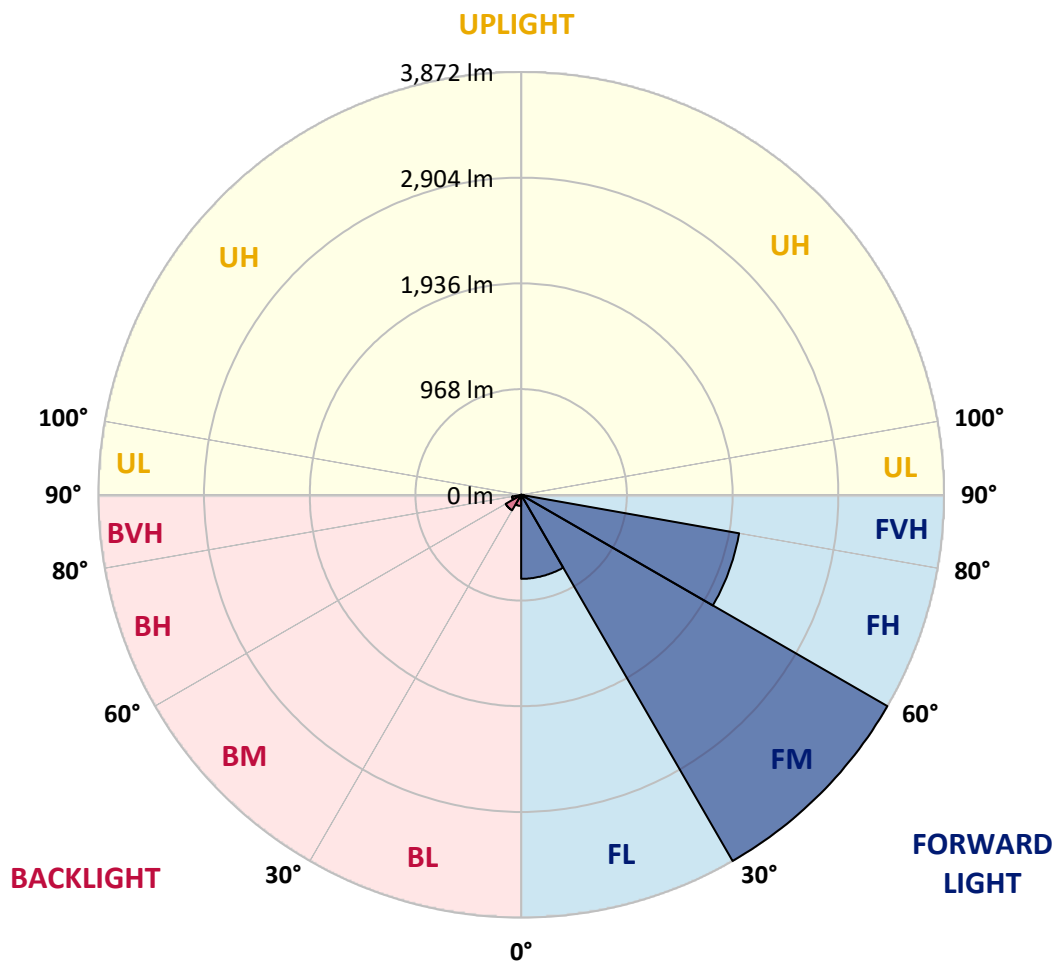
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	769.3	10.9			
FM (30°-60°)	3872.2	55.0			
FH (60°-80°)	2027.0	28.8			G2/5000
FVH (80°-90°)	25.1	0.4			G1/100
BL (0°-30°)	102.1	1.4	B0/110		
BM (30°-60°)	163.9	2.3	B0/220		
BH (60°-80°)	85.1	1.2	B0/110		G0/110
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: B0-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6
2.5°	1079.9	1069.3	1058.7	1046.4	1019.0	971.8	912.6	848.7	769.6	756.0	692.1
5°	1311.0	1306.6	1295.8	1279.1	1248.7	1197.0	1130.1	1035.7	903.4	880.7	745.2
7.5°	1473.8	1470.7	1461.6	1441.9	1414.6	1362.8	1292.8	1191.0	1037.4	1011.4	812.2
10°	1619.9	1618.3	1610.8	1592.4	1565.0	1508.9	1434.2	1327.9	1165.1	1136.1	889.9
12.5°	1752.1	1753.8	1750.6	1741.5	1721.7	1668.5	1583.4	1467.7	1288.3	1256.3	982.6
15°	1829.8	1834.2	1846.5	1864.7	1870.8	1828.2	1739.9	1612.3	1414.6	1387.2	1089.0
17.5°	1803.8	1808.5	1846.5	1908.8	1968.1	1974.3	1895.2	1749.1	1539.2	1511.8	1193.9
20°	1741.5	1747.7	1787.2	1872.3	1987.9	2068.5	2036.5	1898.2	1657.8	1624.5	1294.4
22.5°	1811.5	1811.5	1823.6	1875.4	1980.4	2106.5	2149.1	2047.2	1779.5	1738.5	1394.8
25°	2051.8	2047.2	2021.4	2000.0	2033.6	2146.1	2234.4	2199.3	1922.6	1875.4	1501.2
27.5°	2356.0	2377.3	2328.6	2251.1	2174.9	2223.7	2310.4	2349.8	2080.7	2032.1	1610.8
30°	2696.7	2705.9	2648.1	2544.5	2410.7	2363.6	2400.1	2479.2	2252.6	2199.3	1724.7
32.5°	3003.9	2996.3	2947.7	2839.6	2673.8	2571.9	2515.8	2582.5	2439.6	2378.8	1842.0
35°	3276.2	3282.2	3222.9	3098.3	2935.5	2827.4	2693.7	2699.8	2649.6	2579.6	1977.3
37.5°	3521.0	3510.4	3454.2	3329.4	3181.8	3064.7	2923.4	2821.3	2879.2	2806.2	2129.3
40°	3720.3	3709.7	3650.4	3528.6	3390.3	3294.4	3183.5	2984.2	3121.0	3037.3	2292.1
42.5°	3878.5	3866.3	3816.1	3699.0	3565.2	3480.0	3426.8	3184.9	3379.7	3295.9	2474.7
45°	3956.0	3945.4	3915.1	3826.8	3709.7	3635.1	3661.0	3416.2	3656.5	3586.5	2675.4
47.5°	3864.8	3860.2	3895.2	3880.0	3813.0	3773.5	3863.3	3668.6	3947.0	3878.5	2906.6
50°	3588.0	3595.6	3697.6	3823.7	3855.6	3902.9	4029.1	3934.8	4258.8	4185.7	3172.8
52.5°	2905.1	2956.9	3264.0	3568.2	3804.0	3981.9	4223.7	4315.0	4766.8	4695.3	3588.0
55°	2168.9	2190.2	2524.9	3045.1	3595.6	3975.9	4368.3	4538.5	5017.8	4944.7	3697.6
57.5°	1720.3	1727.8	1893.5	2424.4	3166.6	3838.9	4444.4	4619.3	5127.3	5066.4	3860.2
60°	1350.6	1359.8	1479.9	1844.9	2562.9	3469.3	4334.9	4689.2	5341.7	5293.1	4144.7
62.5°	1050.9	1060.1	1133.1	1347.5	1922.6	2900.4	4114.2	4801.7	5749.3	5726.4	4610.1
65°	813.8	816.7	867.0	967.4	1358.2	2284.5	3845.0	4906.7	6300.0	6280.1	4987.3
67.5°	600.7	605.4	640.3	702.7	917.2	1641.2	3403.9	4826.1	6715.1	6657.2	5124.2
69°	485.2	489.8	520.2	570.3	723.9	1292.8	3000.9	4626.8	6777.5	6722.7	5037.4
70°	415.2	418.3	448.8	491.3	617.6	1098.2	2681.5	4455.0	6695.3	6642.1	4839.8
72.5°	266.2	281.3	311.8	339.2	409.2	727.0	1809.9	3694.5	5776.7	5685.5	3790.3
75°	147.5	152.2	206.9	240.2	272.2	473.0	1006.9	2304.3	3674.6	3610.7	2027.5
77.5°	121.7	124.8	146.1	182.5	182.5	264.6	380.3	908.0	1397.9	1261.0	549.0
80°	85.2	88.3	111.0	120.2	130.9	149.1	123.2	199.2	216.0	191.7	82.1
82.5°	59.3	62.3	76.0	98.9	104.9	70.0	45.6	59.3	62.3	62.3	31.9
85°	10.6	15.2	56.2	82.1	62.3	21.3	25.8	21.3	19.8	21.3	7.5
87.5°	0.0	0.0	34.9	39.5	33.4	9.2	10.6	7.5	4.5	6.1	3.1
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°	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6	655.6
2.5°	660.2	628.2	573.4	533.9	500.4	474.6	464.0	447.1	435.0	441.1	433.5
5°	678.4	622.0	533.9	477.5	438.1	404.5	377.2	355.9	339.2	336.1	333.1
7.5°	707.2	626.7	511.0	441.1	381.8	330.0	287.5	255.5	231.3	231.3	222.2
10°	746.9	638.9	497.3	404.5	316.4	246.3	203.8	173.5	161.2	159.7	156.7
12.5°	801.6	661.6	486.7	357.4	246.3	179.5	153.6	143.0	138.3	136.9	135.4
15°	876.0	695.1	474.6	299.7	187.0	147.5	136.9	127.7	123.2	121.7	120.2
17.5°	947.5	725.6	448.8	240.2	152.2	133.8	121.7	114.1	107.9	106.4	106.4
20°	1014.5	751.3	404.5	187.0	136.9	120.2	107.9	98.9	92.7	91.3	91.3
22.5°	1084.4	772.6	349.8	152.2	124.8	106.4	94.3	85.2	79.1	77.6	76.0
25°	1159.1	787.9	287.5	135.4	112.6	94.3	80.6	73.0	68.5	67.0	65.3
27.5°	1239.7	793.9	228.2	123.2	98.9	82.1	70.0	62.3	59.3	57.9	57.9
30°	1312.7	787.9	176.4	109.6	86.6	71.4	60.8	54.7	51.7	50.1	50.1
32.5°	1388.7	772.6	141.5	97.3	76.0	60.8	51.7	47.2	45.6	44.0	44.0
35°	1469.3	752.9	121.7	86.6	65.3	53.2	45.6	42.6	41.1	39.5	39.5
37.5°	1563.6	728.5	111.0	77.6	57.9	47.2	39.5	38.0	36.6	36.6	36.6
40°	1669.9	698.2	103.5	70.0	51.7	41.1	34.9	33.4	31.9	31.9	31.9
42.5°	1782.5	663.2	95.8	62.3	45.6	34.9	30.5	30.5	28.8	28.8	27.4
45°	1908.8	628.2	88.3	54.7	39.5	30.5	25.8	24.3	24.3	22.7	22.7
47.5°	2057.8	596.3	80.6	48.7	34.9	25.8	22.7	21.3	19.8	18.2	18.2
50°	2267.9	593.2	71.4	42.6	31.9	21.3	18.2	16.7	15.2	13.7	13.7
52.5°	2476.2	565.8	60.8	34.9	25.8	18.2	13.7	12.1	10.6	10.6	9.2
55°	2523.2	520.2	53.2	30.5	19.8	13.7	10.6	7.5	7.5	6.1	6.1
57.5°	2626.7	498.9	45.6	24.3	15.2	10.6	6.1	4.5	4.5	4.5	4.5
60°	2830.5	492.8	39.5	21.3	10.6	7.5	4.5	3.1	3.1	1.4	1.4
62.5°	3111.9	486.7	33.4	18.2	7.5	4.5	3.1	1.4	0.0	0.0	0.0
65°	3267.0	445.6	27.4	13.7	6.1	4.5	1.4	0.0	0.0	0.0	0.0
67.5°	3226.1	368.0	24.3	9.2	4.5	3.1	1.4	0.0	0.0	0.0	0.0
69°	3054.1	310.3	19.8	7.5	4.5	3.1	1.4	0.0	0.0	0.0	0.0
70°	2847.3	267.6	18.2	6.1	3.1	1.4	1.4	0.0	0.0	0.0	0.0
72.5°	2021.4	140.0	12.1	4.5	3.1	1.4	0.0	0.0	0.0	0.0	0.0
75°	944.5	62.3	7.5	3.1	1.4	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	208.3	28.8	4.5	3.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	39.5	10.6	3.1	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.7	4.5	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	0.0	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)