

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: P231077

Luminaire Tested: **ARCH-M-AF48-60-D-U-T2R-7030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231077
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-AF48-60-D-U-T2R-7030-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 405mA 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: 6297 lumens
Efficiency: N/A
Efficacy: 100.0 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): 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

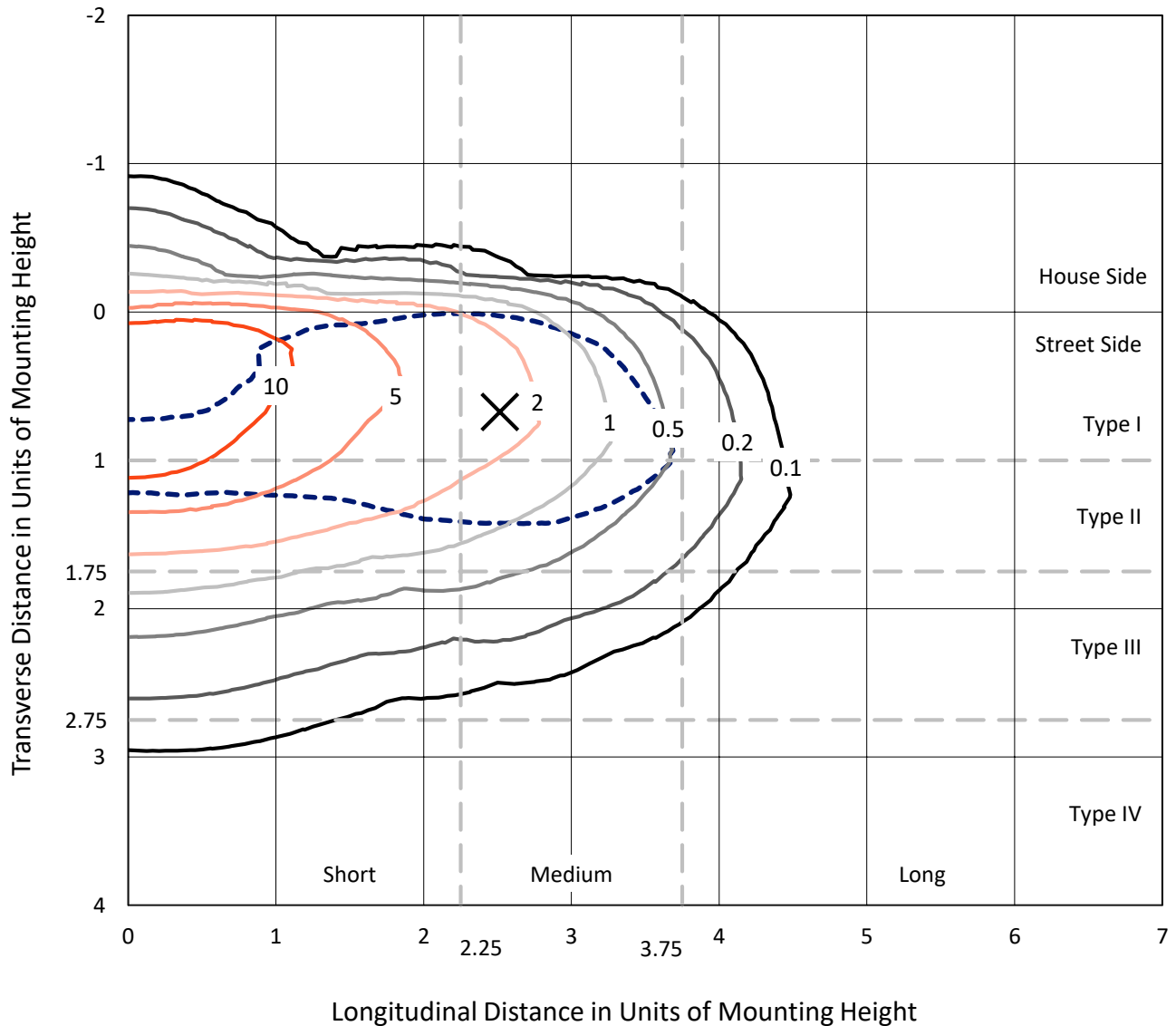


REPORT NUMBER: P231077

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

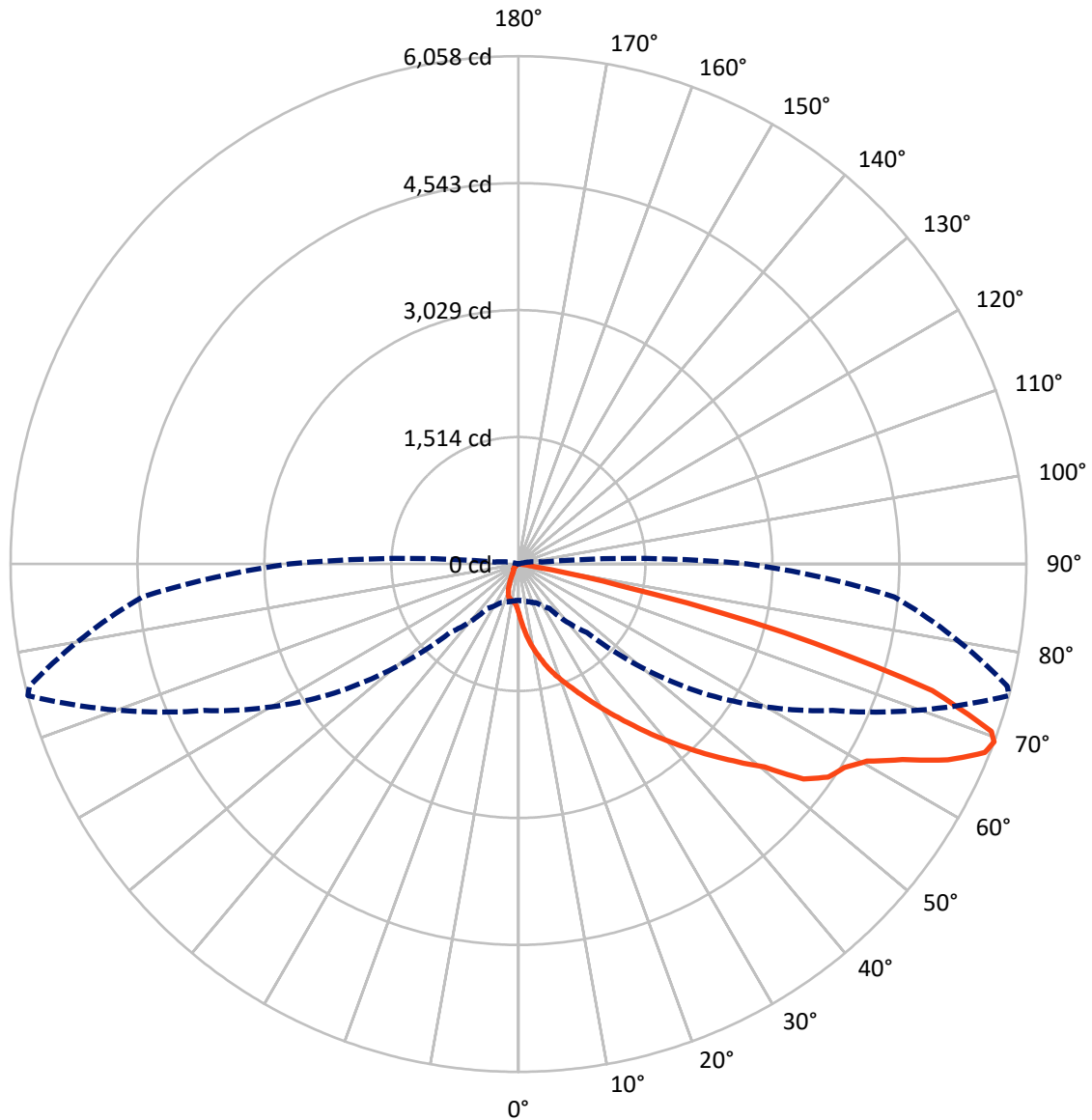


Based on 10 foot mounting height. Maximum calculated value = 16 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P231077

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P231077

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7030-HSS

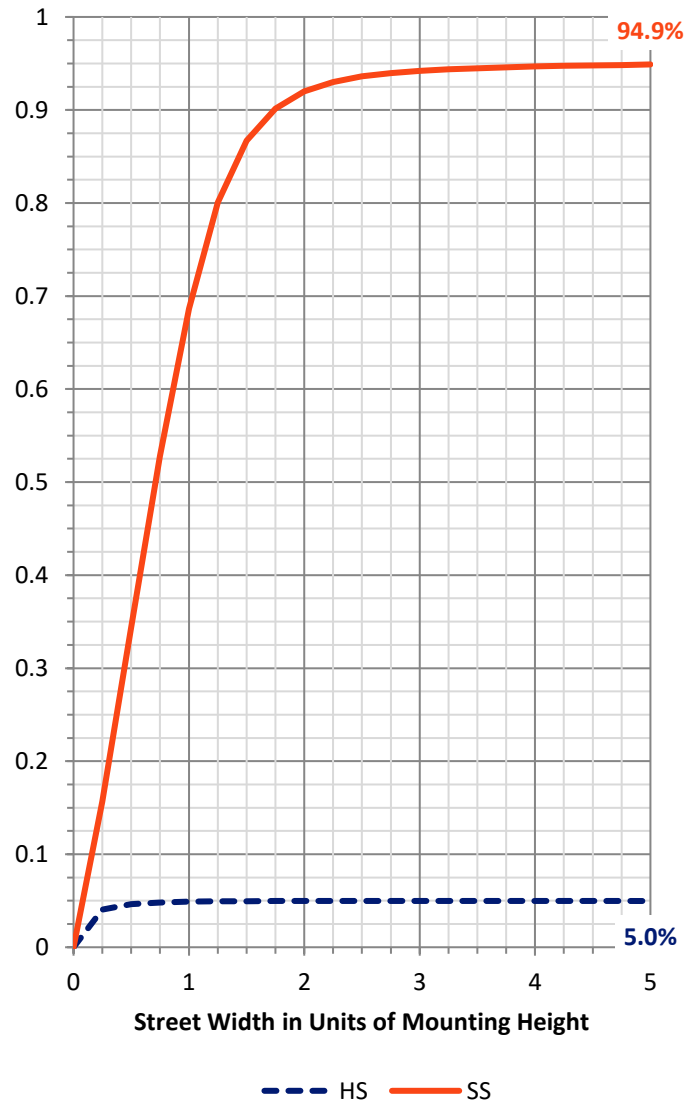
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	314.2	0.0	314.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	5982.8	0.0	5982.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	6297.0	0.0	6297.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	1.1
10°-20°	244.3	3.9
20°-30°	466.3	7.4
30°-40°	836.5	13.3
40°-50°	1281.5	20.4
50°-60°	1489.5	23.7
60°-70°	1318.9	20.9
70°-80°	568.9	9.0
80°-90°	22.8	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°	6297.0	100.0
0°-180°	6297.0	100.0



REPORT NUMBER: P231077

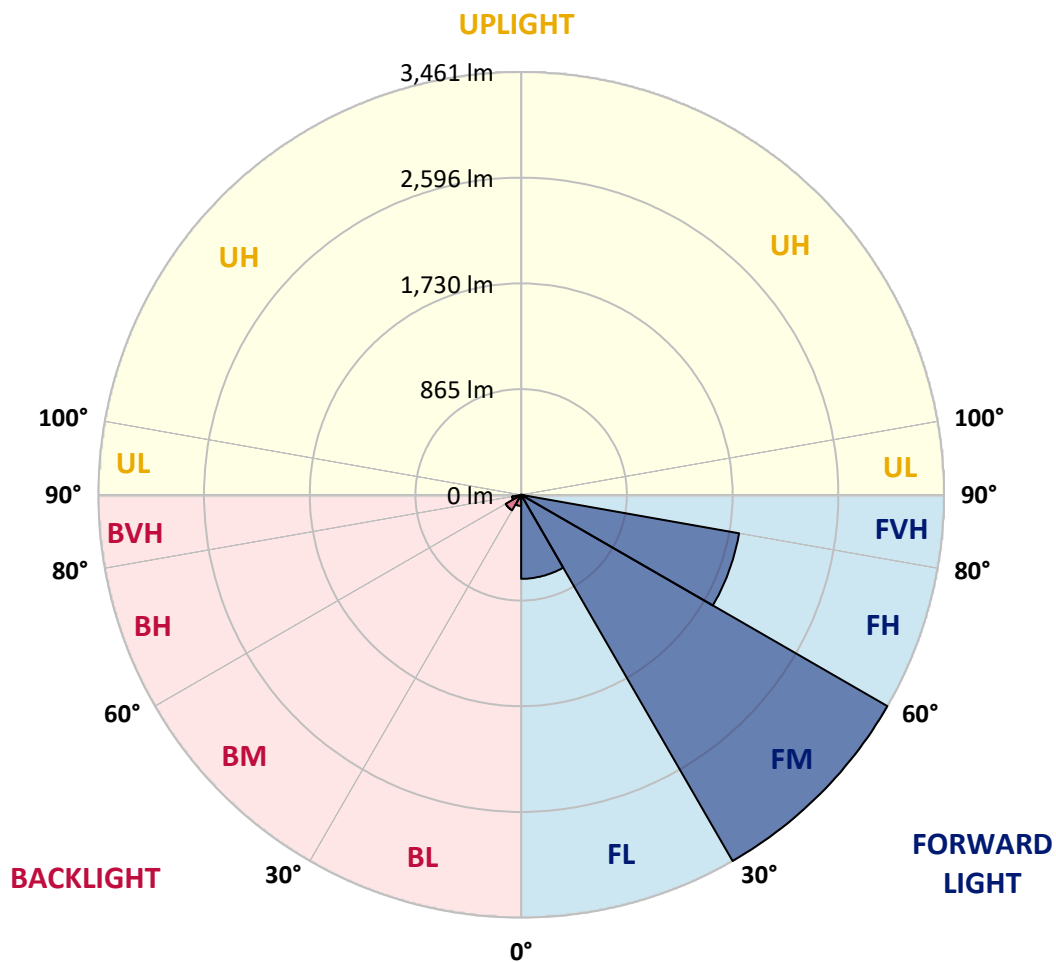
CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	687.6	10.9			
FM (30°-60°)	3461.0	55.0			
FH (60°-80°)	1811.7	28.8			G2/5000
FVH (80°-90°)	22.5	0.4			G1/100
BL (0°-30°)	91.2	1.4	B0/110		
BM (30°-60°)	146.5	2.3	B0/220		
BH (60°-80°)	76.1	1.2	B0/110		G0/110
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: B0-U0-G2

Type II Medium





REPORT NUMBER: P231077

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9
2.5°	965.2	955.7	946.2	935.3	910.8	868.7	815.7	758.6	687.9	675.7	618.6
5°	1171.9	1167.8	1158.3	1143.3	1116.1	1069.9	1010.1	925.8	807.5	787.1	666.1
7.5°	1317.3	1314.6	1306.5	1288.8	1264.3	1218.1	1155.6	1064.5	927.2	904.1	726.0
10°	1447.8	1446.5	1439.7	1423.4	1398.9	1348.6	1282.0	1186.8	1041.4	1015.5	795.3
12.5°	1566.1	1567.5	1564.8	1556.6	1538.9	1491.3	1415.2	1311.9	1151.5	1122.9	878.2
15°	1635.4	1639.5	1650.4	1666.7	1672.2	1634.1	1555.2	1441.0	1264.3	1239.8	973.4
17.5°	1612.3	1616.4	1650.4	1706.1	1759.2	1764.6	1693.9	1563.4	1375.8	1351.3	1067.2
20°	1556.6	1562.0	1597.4	1673.5	1776.8	1848.9	1820.3	1696.6	1481.8	1451.9	1156.9
22.5°	1619.1	1619.1	1630.0	1676.2	1770.0	1882.9	1920.9	1829.9	1590.6	1553.9	1246.6
25°	1833.9	1829.9	1806.7	1787.7	1817.6	1918.2	1997.1	1965.8	1718.4	1676.2	1341.8
27.5°	2105.8	2124.9	2081.4	2012.0	1944.0	1987.6	2065.0	2100.4	1859.8	1816.3	1439.7
30°	2410.3	2418.5	2366.8	2274.4	2154.8	2112.6	2145.3	2215.9	2013.4	1965.8	1541.6
32.5°	2685.0	2678.2	2634.7	2538.1	2390.0	2298.9	2248.6	2308.4	2180.6	2126.2	1646.3
35°	2928.3	2933.7	2880.7	2769.2	2623.8	2527.3	2407.6	2413.1	2368.2	2305.7	1767.3
37.5°	3147.2	3137.7	3087.4	2975.9	2844.0	2739.3	2612.9	2521.8	2573.5	2508.2	1903.3
40°	3325.3	3315.8	3262.7	3154.0	3030.3	2944.6	2845.4	2667.3	2789.6	2714.9	2048.7
42.5°	3466.7	3455.8	3410.9	3306.2	3186.6	3110.5	3062.9	2846.7	3020.8	2946.0	2211.9
45°	3536.0	3526.5	3499.3	3420.4	3315.8	3249.1	3272.3	3053.4	3268.2	3205.6	2391.3
47.5°	3454.4	3450.3	3481.6	3468.0	3408.2	3372.9	3453.1	3279.1	3527.8	3466.7	2598.0
50°	3207.0	3213.8	3304.9	3417.7	3446.3	3488.4	3601.2	3517.0	3806.5	3741.3	2835.9
52.5°	2596.6	2642.8	2917.4	3189.3	3400.0	3559.1	3775.3	3856.8	4260.6	4196.7	3207.0
55°	1938.6	1957.6	2256.7	2721.7	3213.8	3553.7	3904.4	4056.7	4484.9	4419.7	3304.9
57.5°	1537.6	1544.4	1692.5	2167.0	2830.4	3431.3	3972.4	4128.7	4582.8	4528.4	3450.3
60°	1207.2	1215.4	1322.8	1649.0	2290.7	3101.0	3874.5	4191.3	4774.5	4731.0	3704.6
62.5°	939.4	947.6	1012.8	1204.5	1718.4	2592.5	3677.4	4291.9	5138.8	5118.4	4120.6
65°	727.3	730.0	774.9	864.6	1214.0	2041.9	3436.8	4385.7	5630.9	5613.3	4457.7
67.5°	537.0	541.1	572.3	628.1	819.8	1466.9	3042.5	4313.6	6002.1	5950.4	4580.1
69°	433.7	437.8	464.9	509.8	647.1	1155.6	2682.2	4135.5	6057.8	6008.9	4502.6
70°	371.1	373.9	401.0	439.1	551.9	981.5	2396.8	3981.9	5984.4	5936.8	4325.8
72.5°	237.9	251.5	278.7	303.2	365.7	649.8	1617.8	3302.2	5163.3	5081.7	3387.8
75°	131.9	135.9	184.9	214.8	243.3	422.8	900.0	2059.6	3284.5	3227.4	1812.2
77.5°	108.8	111.5	130.5	163.1	163.1	236.5	339.9	811.6	1249.4	1127.0	490.8
80°	76.1	78.8	99.2	107.4	116.9	133.2	110.1	178.1	193.0	171.3	73.4
82.5°	53.0	55.7	68.0	88.4	93.8	62.5	40.8	53.0	55.7	55.7	28.5
85°	9.5	13.6	50.3	73.4	55.7	19.0	23.1	19.0	17.7	19.0	6.8
87.5°	0.0	0.0	31.3	35.3	29.9	8.2	9.5	6.8	4.1	5.4	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



REPORT NUMBER: P231077

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9
2.5°	590.0	561.5	512.5	477.2	447.3	424.2	414.6	399.7	388.8	394.2	387.5
5°	606.3	556.0	477.2	426.9	391.5	361.6	337.1	318.1	303.2	300.4	297.7
7.5°	632.2	560.1	456.8	394.2	341.2	295.0	256.9	228.4	206.6	206.6	198.5
10°	667.5	571.0	444.5	361.6	282.8	220.2	182.2	155.0	144.1	142.7	140.0
12.5°	716.4	591.4	435.0	319.5	220.2	160.4	137.3	127.8	123.7	122.4	121.0
15°	783.1	621.3	424.2	267.8	167.2	131.9	122.4	114.2	110.1	108.8	107.4
17.5°	847.0	648.5	401.0	214.8	135.9	119.6	108.8	102.0	96.5	95.2	95.2
20°	906.8	671.6	361.6	167.2	122.4	107.4	96.5	88.4	82.9	81.6	81.6
22.5°	969.3	690.6	312.7	135.9	111.5	95.2	84.3	76.1	70.7	69.3	68.0
25°	1035.9	704.2	256.9	121.0	100.6	84.3	72.1	65.3	61.2	59.8	58.5
27.5°	1108.0	709.6	203.9	110.1	88.4	73.4	62.5	55.7	53.0	51.7	51.7
30°	1173.2	704.2	157.7	97.9	77.5	63.9	54.4	48.9	46.2	44.9	44.9
32.5°	1241.2	690.6	126.4	87.0	68.0	54.4	46.2	42.1	40.8	39.4	39.4
35°	1313.3	672.9	108.8	77.5	58.5	47.6	40.8	38.1	36.7	35.3	35.3
37.5°	1397.5	651.2	99.2	69.3	51.7	42.1	35.3	34.0	32.6	32.6	32.6
40°	1492.7	624.0	92.4	62.5	46.2	36.7	31.3	29.9	28.5	28.5	28.5
42.5°	1593.3	592.7	85.6	55.7	40.8	31.3	27.2	27.2	25.8	25.8	24.5
45°	1706.1	561.5	78.8	48.9	35.3	27.2	23.1	21.8	21.8	20.4	20.4
47.5°	1839.4	532.9	72.1	43.5	31.3	23.1	20.4	19.0	17.7	16.3	16.3
50°	2027.0	530.2	63.9	38.1	28.5	19.0	16.3	15.0	13.6	12.2	12.2
52.5°	2213.2	505.7	54.4	31.3	23.1	16.3	12.2	10.9	9.5	9.5	8.2
55°	2255.4	464.9	47.6	27.2	17.7	12.2	9.5	6.8	6.8	5.4	5.4
57.5°	2347.8	445.9	40.8	21.8	13.6	9.5	5.4	4.1	4.1	4.1	4.1
60°	2530.0	440.5	35.3	19.0	9.5	6.8	4.1	2.7	2.7	1.4	1.4
62.5°	2781.5	435.0	29.9	16.3	6.8	4.1	2.7	1.4	0.0	0.0	0.0
65°	2920.2	398.3	24.5	12.2	5.4	4.1	1.4	0.0	0.0	0.0	0.0
67.5°	2883.4	329.0	21.8	8.2	4.1	2.7	1.4	0.0	0.0	0.0	0.0
69°	2729.8	277.3	17.7	6.8	4.1	2.7	1.4	0.0	0.0	0.0	0.0
70°	2544.9	239.3	16.3	5.4	2.7	1.4	1.4	0.0	0.0	0.0	0.0
72.5°	1806.7	125.1	10.9	4.1	2.7	1.4	0.0	0.0	0.0	0.0	0.0
75°	844.2	55.7	6.8	2.7	1.4	1.4	0.0	0.0	0.0	0.0	0.0
77.5°	186.2	25.8	4.1	2.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	35.3	9.5	2.7	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	12.2	4.1	1.4	1.4	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°	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)