

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: P265777

Luminaire Tested: **ARCH-M-AF48-60-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265777
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-7027-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 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: 5628.8 lumens
Efficiency: N/A
Efficacy: 89.3 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

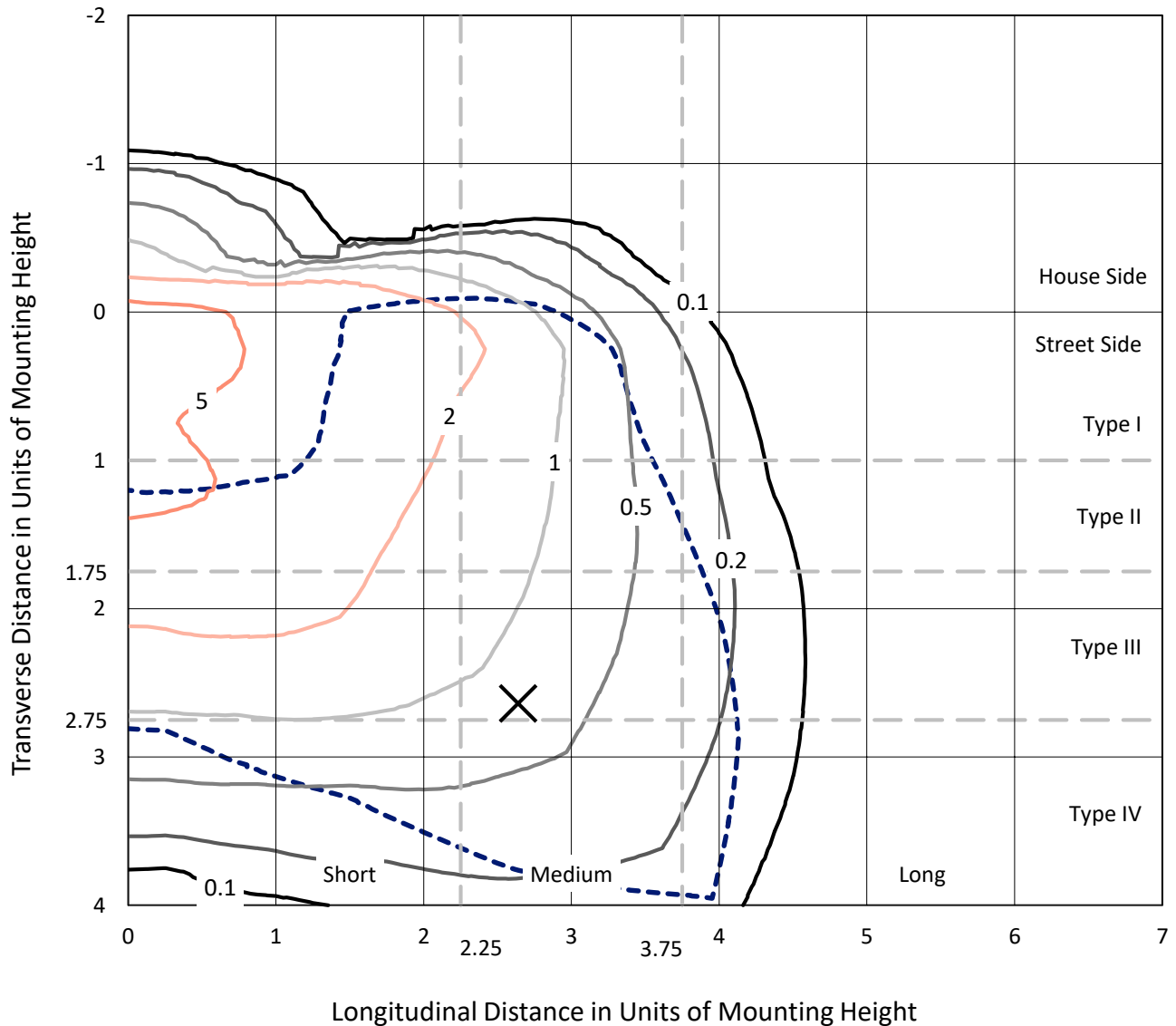


REPORT NUMBER: P265777

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

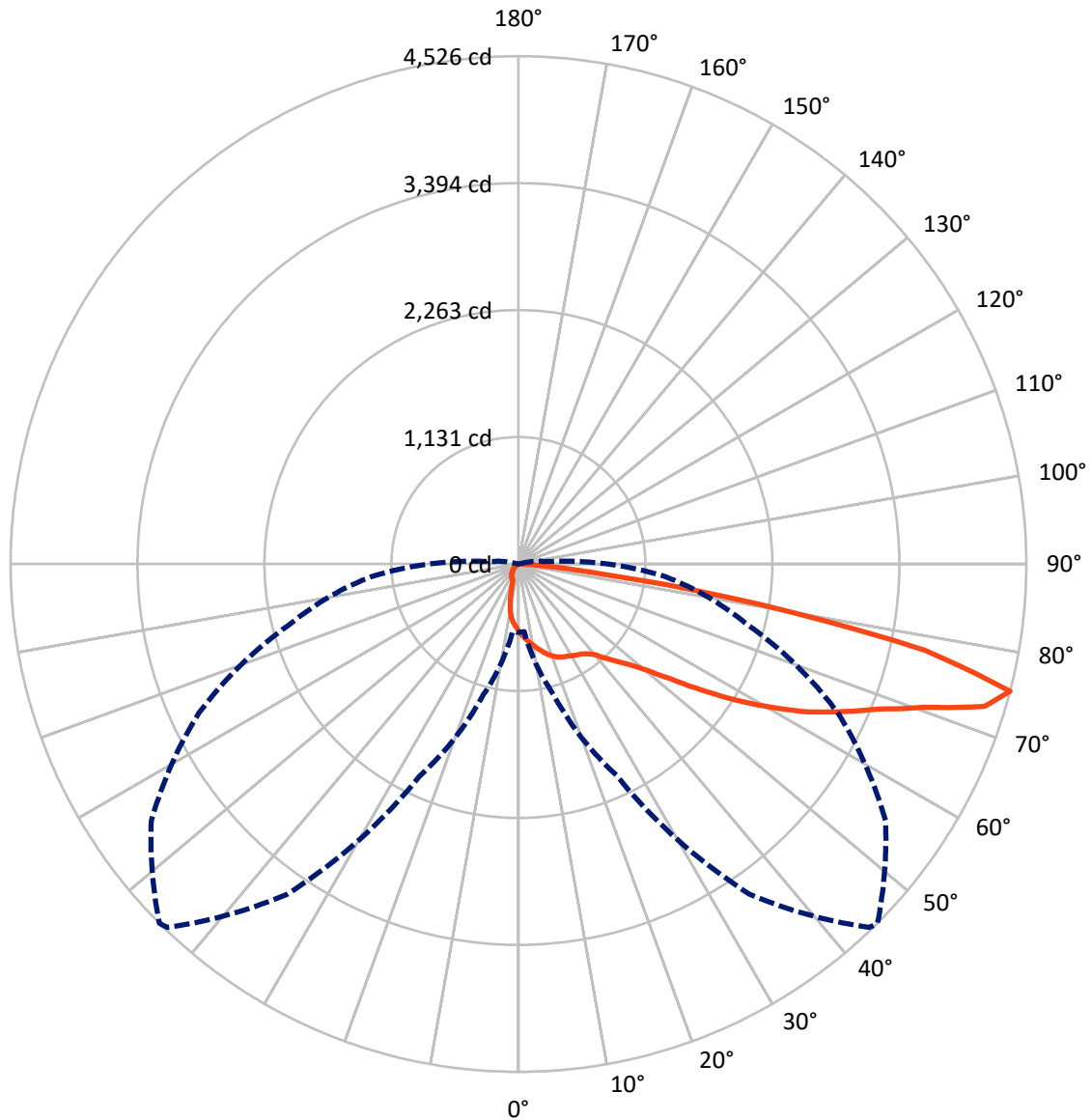


Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265777

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027-HSS

Luminous Intensity Polar Plot



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



REPORT NUMBER: P265777

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027-HSS

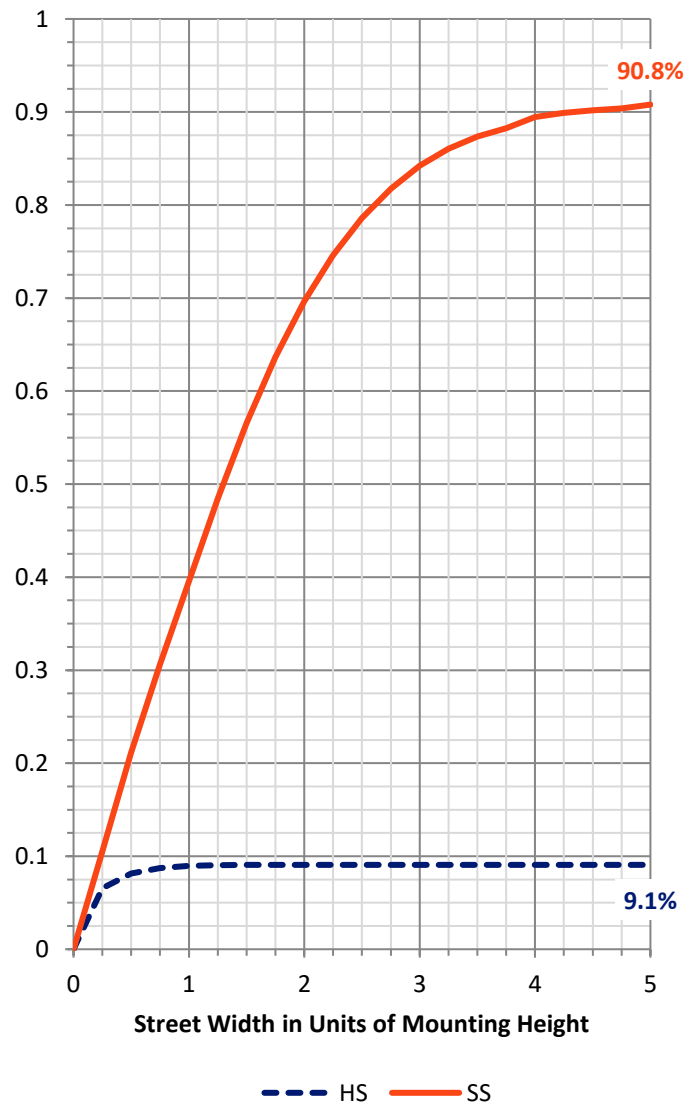
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	514.8	0.0	514.8
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	5113.9	0.0	5113.9
	% Fixture	90.9	0.0	90.9
Total	Lumens	5628.8	0.0	5628.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	1.0
10°-20°	161.0	2.9
20°-30°	266.6	4.7
30°-40°	385.8	6.9
40°-50°	631.7	11.2
50°-60°	1125.6	20.0
60°-70°	1654.8	29.4
70°-80°	1248.4	22.2
80°-90°	97.9	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°	5628.8	100.0
0°-180°	5628.8	100.0



REPORT NUMBER: P265777

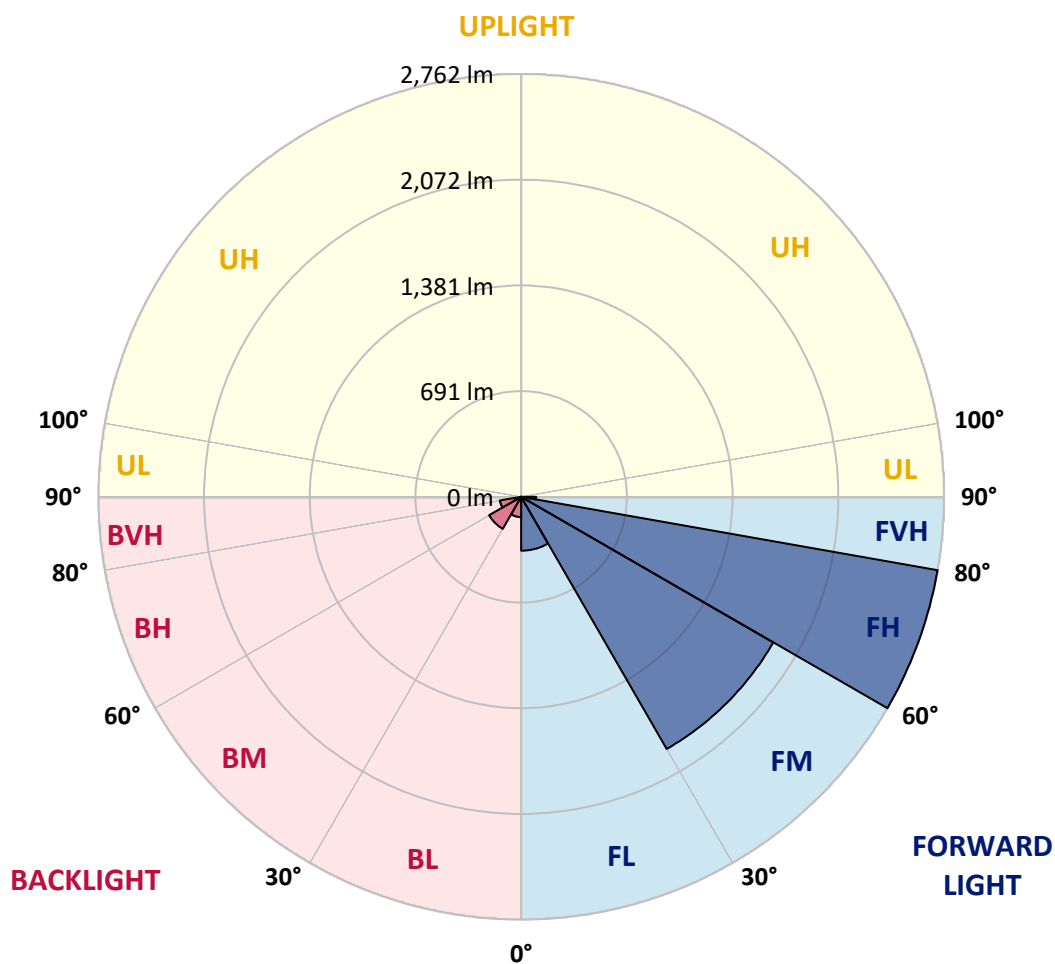
CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	352.1	6.3			
FM	(30°-60°)	1901.9	33.8			
FH	(60°-80°)	2762.3	49.1			G2/5000
FVH	(80°-90°)	97.7	1.7			G1/100
BL	(0°-30°)	132.3	2.4	B1/500		
BM	(30°-60°)	241.2	4.3	B1/1000		
BH	(60°-80°)	141.0	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





REPORT NUMBER: P265777

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0
2.5°	654.0	654.0	652.7	651.4	644.7	637.9	636.7	632.6	620.6	612.6	604.6
5°	708.7	709.9	707.2	700.6	685.9	671.4	670.0	659.3	636.7	620.6	603.3
7.5°	760.5	763.2	756.6	744.5	727.3	705.9	704.6	684.6	655.4	632.6	607.3
10°	804.5	804.5	795.2	780.4	761.9	739.2	736.6	714.0	680.6	652.7	619.3
12.5°	852.4	851.1	837.8	817.7	796.4	775.1	773.8	746.0	714.0	678.0	636.7
15°	896.4	893.8	876.3	857.7	835.2	812.4	811.1	783.1	749.8	707.2	662.1
17.5°	920.4	919.1	903.1	884.4	865.7	848.4	847.1	817.7	781.9	737.9	687.3
20°	924.4	925.8	912.4	896.4	885.6	876.3	876.3	849.7	811.1	764.5	714.0
22.5°	925.8	929.7	920.4	899.1	896.4	897.8	900.5	879.1	839.0	795.2	741.9
25°	935.0	940.3	933.7	908.4	905.8	915.1	917.7	908.4	872.4	828.4	773.8
27.5°	953.7	959.0	953.7	921.8	917.7	927.1	929.7	935.0	908.4	860.4	807.1
30°	990.9	992.3	980.3	940.3	932.4	944.4	948.3	963.1	941.7	891.1	839.0
32.5°	1056.1	1042.9	1006.9	953.7	947.1	960.3	964.3	980.3	972.3	920.4	872.4
35°	1189.4	1120.1	1037.5	972.3	965.7	979.0	984.4	1006.9	1011.0	961.6	913.7
37.5°	1188.1	1125.4	1109.4	1008.3	998.9	1008.3	1014.9	1042.9	1058.9	1016.3	973.7
40°	1272.0	1245.3	1245.3	1076.2	1045.5	1058.9	1065.5	1093.4	1121.4	1088.1	1044.2
42.5°	1535.7	1518.3	1499.7	1206.8	1110.8	1148.2	1152.2	1169.5	1202.7	1192.1	1140.0
45°	1830.0	1814.0	1742.2	1427.9	1222.8	1229.4	1238.8	1266.7	1314.6	1334.6	1273.3
47.5°	2060.5	2044.5	1983.3	1694.3	1397.3	1338.6	1338.6	1393.2	1467.8	1518.3	1459.7
50°	2245.7	2227.0	2189.7	1977.9	1683.6	1495.8	1487.8	1551.7	1662.3	1740.8	1700.9
52.5°	2425.5	2370.8	2348.2	2270.9	2007.3	1723.5	1702.2	1747.6	1900.6	1997.9	1964.7
55°	2545.3	2537.4	2513.4	2540.0	2346.8	2000.5	1981.9	1991.3	2183.1	2248.3	2207.0
57.5°	2657.1	2655.8	2709.2	2833.1	2717.2	2317.5	2288.3	2273.6	2456.1	2440.1	2476.1
60°	2795.7	2771.7	2895.5	3072.7	3056.8	2626.6	2593.2	2563.9	2665.2	2619.8	2798.4
62.5°	2802.4	2795.7	3047.4	3301.8	3393.7	2941.0	2902.2	2797.1	2847.6	2795.7	3106.1
65°	2548.0	2581.3	3111.4	3423.0	3676.1	3216.7	3169.9	3006.2	3010.1	2975.5	3468.4
67.5°	2490.7	2508.0	2935.7	3553.5	3879.9	3494.9	3451.0	3247.3	3199.3	3202.0	3682.8
70°	2348.2	2374.8	2717.2	3544.3	4041.0	3866.6	3822.6	3601.6	3485.7	3356.4	3517.7
72.5°	1794.2	1839.4	2289.6	3107.3	3997.1	4352.7	4340.7	4050.4	3600.1	3082.1	2661.1
75°	607.3	606.0	1202.7	2087.1	3590.9	4501.9	4525.9	3994.5	3140.7	2125.7	1321.2
77.5°	130.6	131.8	247.8	845.8	2385.4	3614.9	3706.8	3012.8	2025.9	947.1	302.4
80°	63.9	65.2	102.5	223.8	953.7	2027.1	2171.1	1549.0	748.6	189.2	50.7
82.5°	32.0	33.2	53.3	118.5	352.9	720.6	769.8	570.1	214.4	106.5	25.3
85°	11.9	11.9	26.6	70.5	161.2	169.2	207.8	165.2	129.1	86.5	6.6
87.5°	2.6	2.6	14.6	34.7	72.0	53.3	53.3	50.7	78.6	58.6	2.6
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: P265777

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0	602.0
2.5°	600.6	595.3	586.1	576.7	570.1	562.1	558.0	554.1	552.7	551.4	554.1
5°	594.0	586.1	568.7	554.1	540.8	530.1	522.2	514.1	510.1	507.5	508.8
7.5°	594.0	582.0	556.7	534.1	512.8	490.1	467.5	450.2	436.8	428.9	430.2
10°	600.6	584.6	551.4	520.7	480.9	432.9	383.5	346.2	321.1	306.3	306.3
12.5°	615.3	594.0	552.7	504.8	436.8	352.9	278.4	233.1	214.4	203.7	205.2
15°	635.3	609.9	559.5	483.5	375.6	262.3	194.5	165.2	165.2	167.9	169.2
17.5°	658.0	630.0	564.8	451.5	297.0	187.7	153.3	150.5	154.5	161.2	161.2
20°	680.6	650.0	567.4	401.0	222.4	149.2	145.2	145.2	147.9	154.5	155.9
22.5°	708.7	675.3	564.8	338.3	166.5	141.2	139.9	139.9	139.9	147.9	147.9
25°	737.9	704.6	554.1	271.6	141.2	135.9	134.6	133.2	133.2	139.9	141.2
27.5°	771.1	735.3	528.8	207.8	133.2	130.6	129.1	126.5	126.5	131.8	131.8
30°	804.5	769.8	490.1	157.2	126.5	125.3	122.4	119.8	117.1	122.4	122.4
32.5°	840.5	805.8	439.5	125.3	117.1	117.1	115.9	111.8	109.2	111.8	113.1
35°	888.5	847.1	382.3	109.2	105.2	105.2	105.2	103.9	98.5	101.1	101.1
37.5°	952.4	904.4	315.7	101.1	95.8	93.2	93.2	93.2	89.2	90.5	90.5
40°	1033.6	971.0	251.7	94.6	89.2	82.6	79.9	81.2	78.6	78.6	77.3
42.5°	1144.1	1042.9	189.2	89.2	83.9	74.6	69.3	67.9	65.2	63.9	63.9
45°	1302.6	1130.7	135.9	83.9	79.9	65.2	59.9	56.0	49.2	45.3	45.3
47.5°	1507.7	1230.7	101.1	78.6	75.9	57.3	50.7	42.6	33.2	30.6	30.6
50°	1758.2	1342.5	85.2	70.5	69.3	50.7	40.0	27.9	18.7	16.0	17.2
52.5°	2002.0	1447.8	75.9	62.6	61.3	43.9	29.4	14.6	7.9	7.9	7.9
55°	2207.0	1522.4	69.3	56.0	53.3	34.7	16.0	6.6	4.0	4.0	4.0
57.5°	2392.1	1564.9	62.6	49.2	42.6	24.0	6.6	2.6	2.6	1.3	1.3
60°	2561.2	1590.3	54.5	42.6	33.2	13.4	2.6	1.3	1.3	0.0	0.0
62.5°	2727.9	1609.0	46.6	34.7	25.3	5.3	1.3	1.3	0.0	0.0	0.0
65°	2854.4	1602.2	37.3	27.9	16.0	2.6	1.3	0.0	0.0	0.0	0.0
67.5°	2850.3	1511.8	27.9	21.3	7.9	1.3	0.0	0.0	0.0	0.0	0.0
70°	2549.3	1273.3	18.7	13.4	2.6	1.3	0.0	0.0	0.0	0.0	0.0
72.5°	1808.7	816.5	11.9	7.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	796.4	247.8	6.6	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	155.9	57.3	4.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	37.3	6.6	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.0	1.3	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)