

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: P214852

Luminaire Tested: **ARCH-AF16-60-D-U-T4W-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214852  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF16-60-D-U-T4W-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6471.4 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' 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

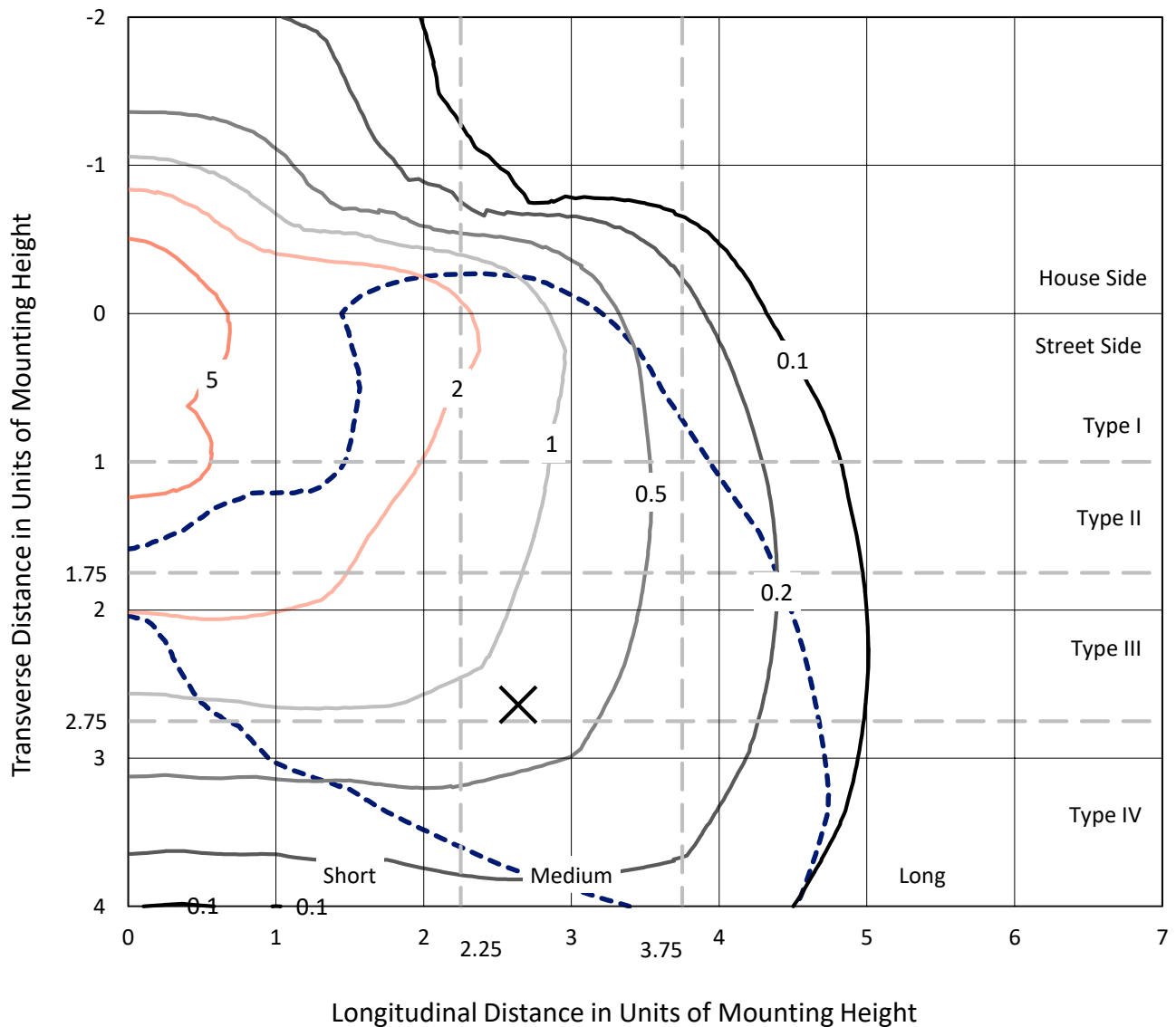


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

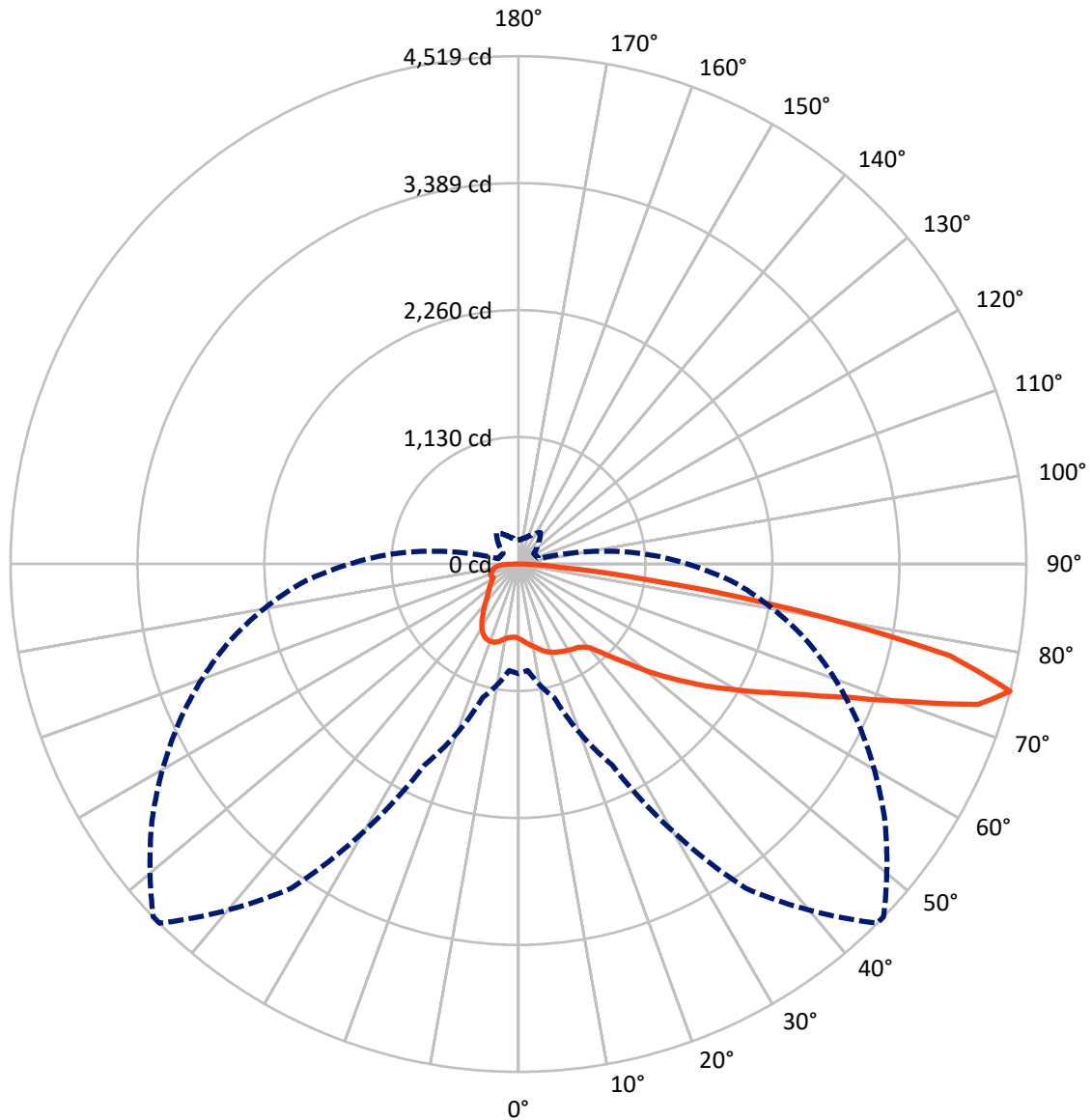


Based on 10 foot mounting height. Maximum calculated value = 7.8 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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



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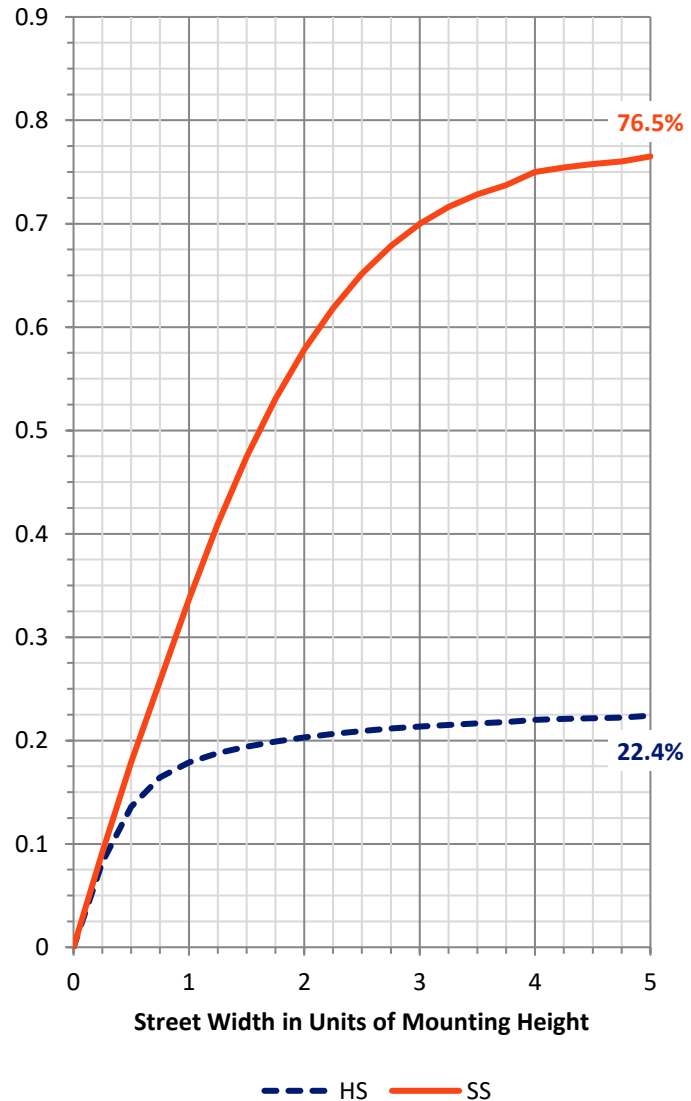
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1499.2	0.0	1499.2
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	4972.3	0.0	4972.3
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	6471.4	0.0	6471.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.7	1.0
10°-20°	213.0	3.3
20°-30°	365.6	5.6
30°-40°	511.3	7.9
40°-50°	750.1	11.6
50°-60°	1168.4	18.1
60°-70°	1681.2	26.0
70°-80°	1464.5	22.6
80°-90°	251.5	3.9
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°	6471.4	100.0
0°-180°	6471.4	100.0

**Coefficient of Utilization**



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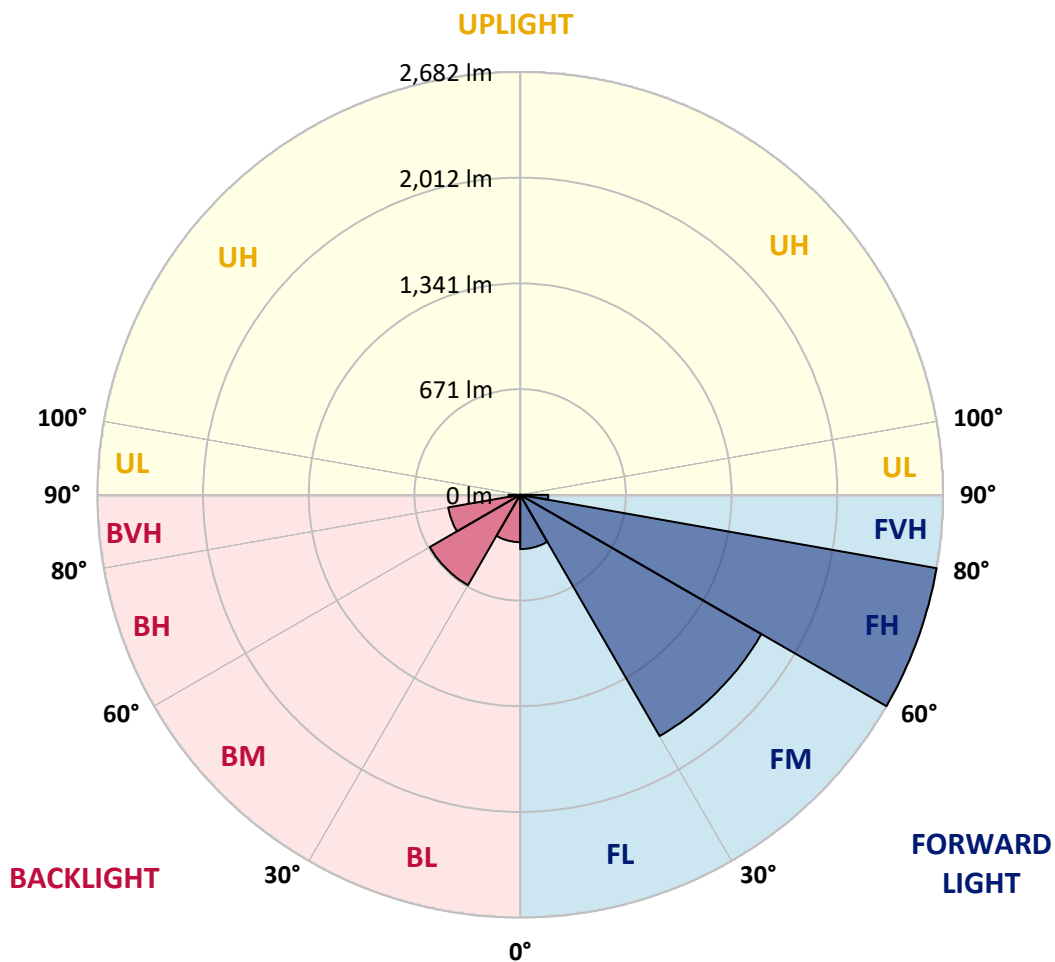
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	344.1	5.3			
FM	(30°-60°)	1767.2	27.3			
FH	(60°-80°)	2682.5	41.5			G2/5000
FVH	(80°-90°)	178.5	2.8			G2/225
BL	(0°-30°)	300.3	4.6	B1/500		
BM	(30°-60°)	662.5	10.2	B1/1000		
BH	(60°-80°)	463.3	7.2	B1/500		G1/500
BVH	(80°-90°)	73.1	1.1			G1/100
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°	45°	46°	55°	65°	75°	85°
0°	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4
2.5°	696.1	691.1	691.1	687.4	687.4	681.0	678.5	677.3	671.0	667.1	663.4
5°	736.4	730.2	728.9	720.0	716.3	702.4	701.2	692.3	681.0	669.8	660.9
7.5°	772.9	769.1	762.8	754.0	742.8	725.1	723.9	709.9	691.1	676.0	663.4
10°	799.3	796.8	788.1	776.8	764.2	746.5	745.2	730.2	707.5	689.9	672.3
12.5°	830.8	827.1	815.7	800.7	786.7	770.4	769.1	756.6	731.4	708.8	686.0
15°	861.1	856.0	842.2	827.1	811.9	798.1	798.1	784.3	757.8	731.4	704.9
17.5°	876.1	873.6	859.8	843.5	830.8	820.7	819.6	806.9	780.4	752.8	723.9
20°	881.1	882.5	869.8	852.2	843.5	838.3	837.2	828.3	799.3	772.9	745.2
22.5°	880.0	883.7	873.6	854.7	852.2	852.2	852.2	842.2	819.6	793.1	765.4
25°	885.0	890.0	882.5	859.8	859.8	864.8	864.8	859.8	839.6	817.0	789.3
27.5°	902.6	906.5	900.1	868.6	869.8	877.5	876.1	877.5	864.8	843.5	815.7
30°	924.0	929.0	921.5	882.5	881.1	888.8	888.8	895.1	886.2	863.5	840.9
32.5°	981.9	980.6	956.7	897.6	893.7	901.4	901.4	907.6	902.6	885.0	863.5
35°	1154.4	1135.5	1082.6	946.6	908.9	912.7	912.7	924.0	926.5	912.7	893.7
37.5°	1330.6	1324.3	1284.1	1077.7	964.3	936.6	935.4	951.6	963.0	951.6	939.1
40°	1508.1	1503.1	1494.2	1252.5	1080.1	979.4	975.5	989.5	1009.5	1002.0	994.5
42.5°	1673.0	1670.5	1679.4	1425.1	1227.4	1071.3	1060.0	1043.5	1072.5	1069.9	1069.9
45°	1802.7	1809.0	1814.0	1586.1	1387.3	1189.7	1175.7	1120.4	1159.4	1169.5	1177.0
47.5°	1875.7	1880.7	1898.4	1743.6	1547.1	1326.9	1316.8	1226.1	1277.7	1308.0	1329.3
50°	1980.3	1966.3	1981.4	1897.1	1739.7	1505.6	1477.8	1368.4	1433.8	1486.7	1537.1
52.5°	2080.9	2058.2	2070.8	2074.7	1958.8	1680.5	1651.6	1535.7	1617.6	1700.7	1790.1
55°	2171.5	2170.2	2182.9	2247.0	2170.2	1868.2	1835.4	1720.9	1839.2	1928.5	2079.6
57.5°	2244.5	2257.1	2312.5	2447.2	2414.5	2072.1	2035.6	1936.1	2075.8	2165.2	2415.7
60°	2330.2	2350.2	2442.2	2617.2	2637.3	2286.0	2248.3	2176.6	2318.8	2409.3	2804.6
62.5°	2359.1	2388.1	2576.9	2796.0	2870.1	2520.2	2486.2	2438.3	2574.3	2656.2	3192.4
65°	2166.5	2221.9	2651.1	2887.8	3120.7	2802.2	2773.2	2731.7	2828.6	2882.8	3455.6
67.5°	2113.6	2138.8	2506.4	3019.9	3356.1	3164.7	3135.7	3064.0	3066.6	3043.9	3541.1
70°	2039.4	2067.0	2357.9	3119.5	3693.5	3660.7	3625.4	3414.1	3284.4	3147.1	3372.5
72.5°	1737.2	1728.4	2031.7	2851.3	3855.9	4275.1	4233.5	3790.4	3445.5	3057.7	2846.2
75°	975.5	950.4	1232.5	1972.5	3521.0	4519.3	4518.0	3980.5	3332.2	2663.7	1937.3
77.5°	283.2	275.7	406.6	827.1	2370.4	3926.3	3974.2	3590.3	2780.7	1913.4	1063.7
80°	133.4	135.9	175.1	273.1	1012.1	2534.0	2671.3	2364.2	1661.8	882.5	439.3
82.5°	84.3	85.5	119.6	176.2	428.0	1150.6	1263.9	1063.7	658.4	381.5	193.8
85°	52.9	52.9	79.3	115.9	255.5	367.5	399.1	362.5	282.0	207.7	105.8
87.5°	29.0	29.0	47.8	66.7	139.8	118.3	122.2	144.8	176.2	127.2	52.9
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°	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4	663.4
2.5°	662.1	659.6	655.9	654.6	653.4	652.1	653.4	655.9	653.4	653.4	654.6
5°	658.4	655.9	650.8	650.8	652.1	653.4	659.6	663.4	664.7	664.7	664.7
7.5°	658.4	654.6	650.8	652.1	654.6	659.6	669.8	676.0	681.0	682.4	682.4
10°	664.7	659.6	657.0	659.6	667.1	671.0	681.0	691.1	697.4	700.0	700.0
12.5°	676.0	671.0	671.0	676.0	686.0	691.1	700.0	707.5	715.0	718.8	718.8
15°	694.9	688.6	689.9	698.7	709.9	715.0	721.3	723.9	730.2	735.2	735.2
17.5°	712.5	706.3	708.8	718.8	726.3	728.9	732.7	731.4	733.9	737.7	738.9
20°	732.7	726.3	727.6	733.9	735.2	732.7	732.7	728.9	727.6	733.9	736.4
22.5°	752.8	746.5	745.2	741.5	735.2	728.9	725.1	721.3	718.8	725.1	727.6
25°	776.8	767.9	761.6	745.2	728.9	717.5	712.5	709.9	708.8	715.0	717.5
27.5°	803.2	794.4	775.4	740.2	713.8	694.9	691.1	691.1	693.6	697.4	700.0
30°	828.3	819.6	785.6	728.9	687.4	659.6	655.9	659.6	665.9	669.8	673.5
32.5°	853.6	844.7	791.8	711.3	648.4	613.1	610.5	616.9	626.9	629.5	631.9
35°	887.5	878.7	799.3	686.0	599.2	561.5	559.0	562.6	571.5	575.2	579.1
37.5°	935.4	930.4	810.7	658.4	554.0	512.3	504.8	502.3	507.3	506.1	511.2
40°	998.3	1002.0	830.8	621.9	509.8	467.1	450.7	443.1	438.1	428.0	433.0
42.5°	1090.2	1092.7	853.6	580.2	472.1	424.3	402.8	389.0	378.9	362.5	365.0
45°	1224.9	1203.5	880.0	536.3	438.1	390.3	365.0	348.7	334.9	321.0	322.4
47.5°	1403.7	1338.2	908.9	499.8	404.0	362.5	339.9	321.0	304.7	293.4	294.6
50°	1623.9	1505.6	937.9	465.8	370.1	341.1	321.0	300.9	284.5	273.1	271.9
52.5°	1914.7	1706.9	956.7	428.0	336.1	322.4	304.7	285.7	265.6	251.8	250.5
55°	2216.9	1941.1	973.1	382.7	303.4	300.9	292.0	270.6	246.7	229.1	226.6
57.5°	2549.1	2191.6	985.6	338.6	278.2	283.2	280.7	255.5	229.1	212.7	211.5
60°	2851.3	2451.0	945.4	299.6	255.5	265.6	268.1	246.7	232.9	236.6	237.9
62.5°	3156.0	2651.1	791.8	270.6	240.5	254.2	275.7	274.5	268.1	274.5	275.7
65°	3265.4	2692.7	561.5	246.7	225.3	259.3	299.6	297.0	268.1	256.8	254.2
67.5°	3203.8	2569.3	377.6	227.8	214.0	265.6	324.8	297.0	258.1	243.0	237.9
70°	2910.4	2265.9	277.0	209.0	204.0	264.4	338.6	295.9	253.1	236.6	230.3
72.5°	2321.3	1748.5	222.8	191.3	188.8	258.1	346.2	293.4	248.0	230.3	222.8
75°	1503.1	1087.6	187.6	173.7	166.2	248.0	342.4	285.7	241.7	219.1	214.0
77.5°	697.4	468.2	159.8	153.6	144.8	232.9	331.0	270.6	227.8	206.5	200.2
80°	324.8	221.6	134.7	133.4	129.7	220.2	316.0	253.1	211.5	193.8	183.8
82.5°	173.7	133.4	109.5	109.5	113.3	205.2	297.0	231.6	190.1	181.3	154.8
85°	91.9	76.8	79.3	85.5	96.9	181.3	271.9	209.0	166.2	138.4	134.7
87.5°	46.6	49.0	49.0	57.9	74.3	147.3	224.1	172.4	141.0	113.3	110.8
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)