

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: P236842

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236842
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13468.2 lumens
Efficiency: N/A
Efficacy: 144.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 93
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

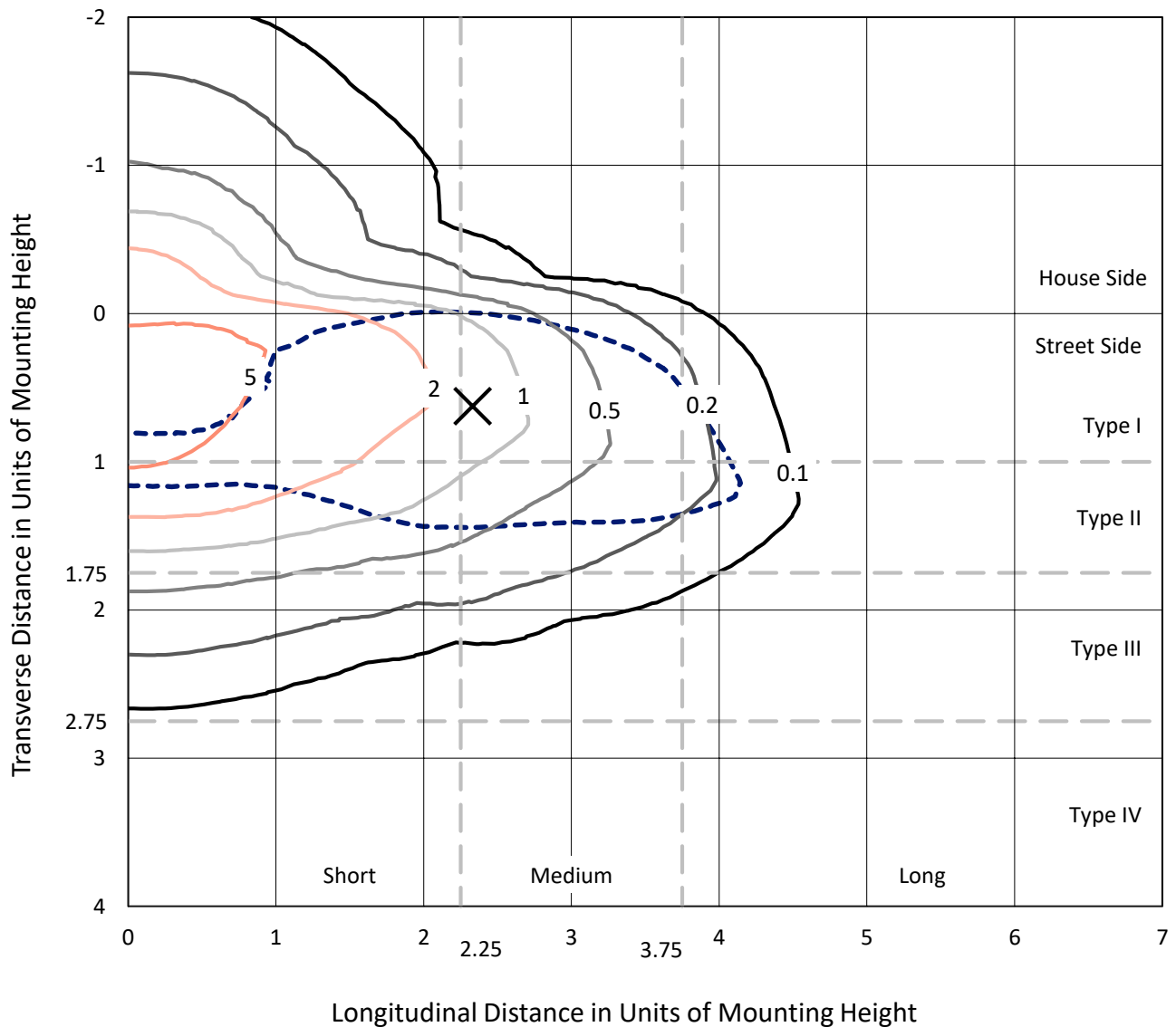


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

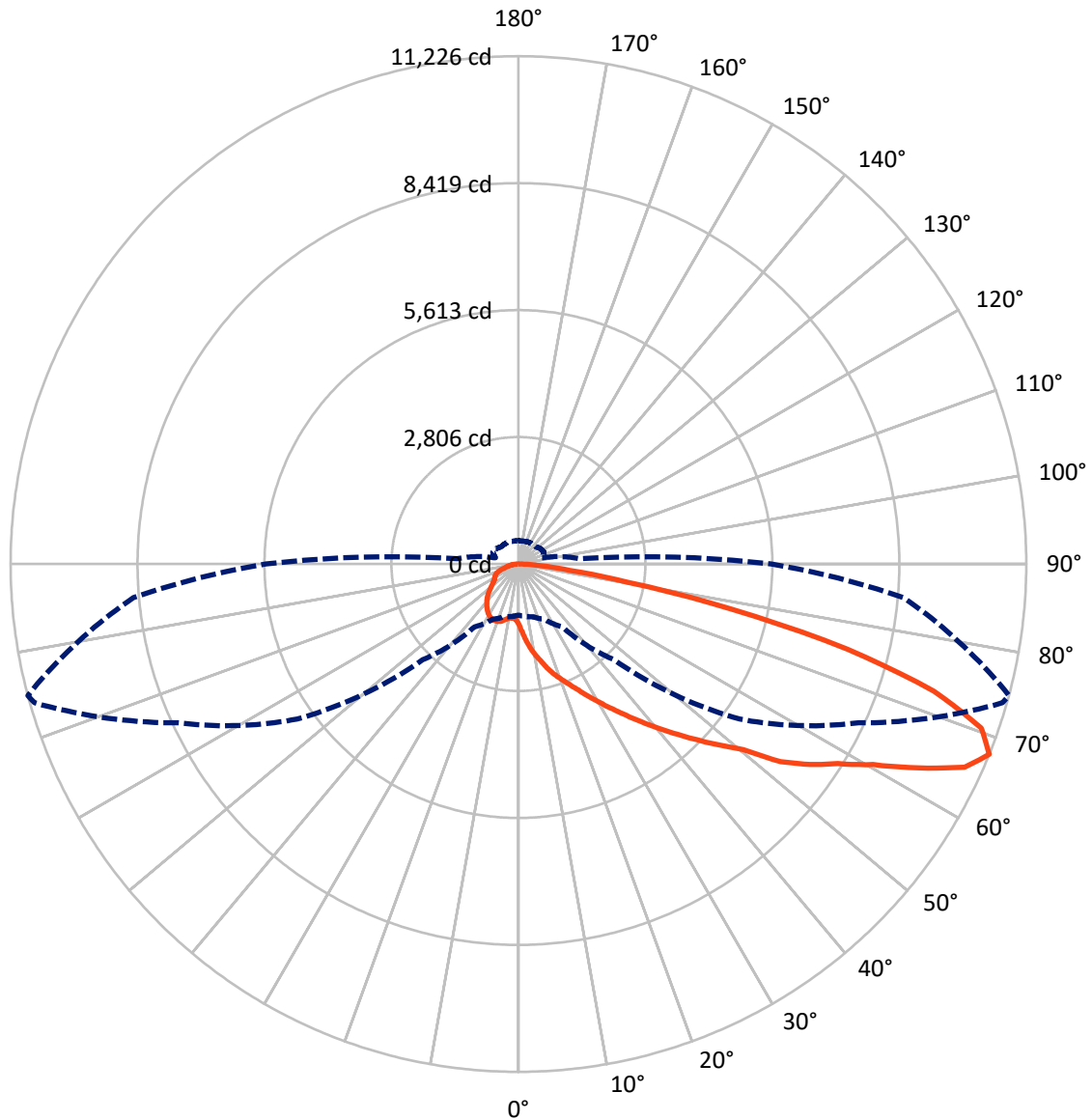


Based on 20 foot mounting height. Maximum calculated value = 7 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2299.9	0.0	2299.9
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	11168.3	0.0	11168.3
	% Fixture	82.9	0.0	82.9
Total	Lumens	13468.2	0.0	13468.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.8	1.2
10°-20°	566.6	4.2
20°-30°	1033.4	7.7
30°-40°	1696.3	12.6
40°-50°	2453.0	18.2
50°-60°	2890.9	21.5
60°-70°	2809.3	20.9
70°-80°	1561.6	11.6
80°-90°	300.3	2.2
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°	13468.2	100.0
0°-180°	13468.2	100.0



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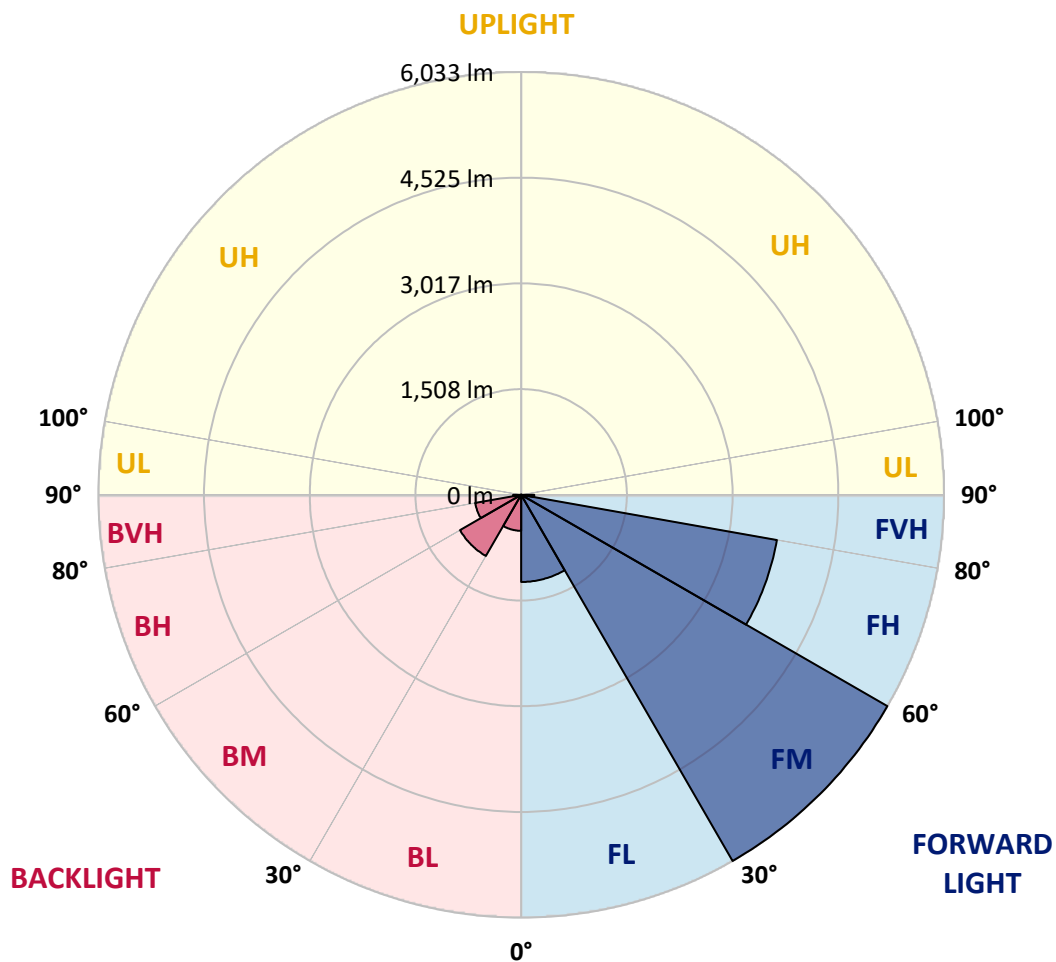
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1243.5	9.2			
FM (30°-60°)	6033.0	44.8			
FH (60°-80°)	3704.9	27.5			G2/5000
FVH (80°-90°)	186.9	1.4			G2/225
BL (0°-30°)	513.3	3.8	B2/1000		
BM (30°-60°)	1007.2	7.5	B2/2500		
BH (60°-80°)	665.9	4.9	B2/1000		G2/1000
BVH (80°-90°)	113.4	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5
2.5°	1892.0	1897.7	1886.4	1861.1	1824.4	1756.9	1697.8	1593.6	1500.7	1489.4	1390.9
5°	2224.3	2229.9	2215.8	2184.8	2145.4	2072.2	1990.6	1855.4	1706.2	1678.0	1469.7
7.5°	2452.3	2455.2	2438.2	2407.3	2376.3	2303.1	2221.4	2069.4	1886.4	1863.9	1571.0
10°	2646.6	2652.2	2629.7	2610.0	2576.2	2503.1	2418.6	2258.1	2069.4	2038.4	1675.3
12.5°	2826.8	2832.4	2818.3	2801.5	2790.2	2722.6	2629.7	2438.2	2235.6	2201.8	1799.2
15°	2947.8	2953.5	2956.3	2978.8	2992.9	2945.1	2852.1	2643.8	2415.7	2384.8	1945.6
17.5°	2914.1	2928.2	2970.3	3052.1	3139.3	3142.1	3066.1	2846.5	2593.1	2559.3	2094.8
20°	2815.6	2826.8	2877.5	3001.3	3173.1	3271.6	3266.0	3052.1	2759.2	2722.6	2232.7
22.5°	2897.2	2911.2	2911.2	2987.3	3156.2	3339.2	3412.5	3254.7	2925.3	2891.6	2370.7
25°	3246.3	3254.7	3195.6	3164.7	3226.6	3395.6	3533.5	3474.4	3128.1	3088.6	2519.9
27.5°	3733.4	3719.3	3646.1	3522.2	3454.7	3499.7	3640.5	3682.7	3361.7	3313.8	2674.7
30°	4217.6	4209.2	4124.7	3958.6	3806.6	3710.9	3758.7	3868.6	3615.1	3558.8	2824.0
32.5°	4671.0	4656.9	4564.0	4369.7	4198.0	4020.6	3927.7	4037.5	3885.5	3820.7	2990.1
35°	5087.6	5051.0	4958.1	4755.4	4578.0	4409.1	4181.1	4198.0	4178.2	4110.7	3173.1
37.5°	5425.5	5397.4	5296.0	5107.4	4918.8	4758.3	4518.9	4381.0	4493.6	4428.9	3384.2
40°	5724.0	5693.0	5588.8	5400.2	5225.6	5073.6	4885.0	4603.4	4848.4	4775.1	3620.7
42.5°	5949.2	5926.7	5842.3	5656.4	5487.5	5349.5	5256.6	4885.0	5217.2	5146.8	3879.8
45°	6070.3	6047.8	6002.7	5853.5	5698.7	5591.7	5600.1	5220.0	5602.9	5543.8	4186.7
47.5°	5921.0	5937.9	5977.4	5949.2	5853.5	5802.8	5907.0	5566.3	6033.7	5977.4	4518.9
50°	5521.3	5538.2	5695.8	5890.0	5923.9	5985.8	6182.9	5966.2	6489.8	6444.8	4930.0
52.5°	4538.6	4631.5	5068.0	5532.5	5850.7	6106.9	6489.8	6560.2	7258.4	7258.4	5656.4
55°	3429.3	3511.0	4009.4	4820.2	5566.3	6118.2	6715.1	6962.8	7813.1	7824.3	6036.5
57.5°	2778.9	2829.6	3074.6	3905.1	4969.4	5977.4	6982.6	7309.1	8274.9	8325.5	6526.4
60°	2255.2	2283.4	2443.9	3021.1	4144.5	5597.3	7174.0	7804.7	8933.7	9004.1	7151.4
62.5°	1813.2	1841.3	1948.3	2294.7	3252.0	4885.0	7140.2	8319.9	9812.1	9927.5	7970.7
65°	1447.2	1478.2	1548.5	1762.5	2410.1	4000.9	6793.9	8584.6	10721.5	10834.2	8514.2
67.5°	1129.0	1157.2	1205.0	1345.8	1697.8	2992.9	5974.5	8305.8	11129.8	11225.6	8542.4
70°	853.1	867.2	906.6	996.7	1213.5	1987.8	4676.6	7371.1	10763.8	10851.1	7979.2
72.5°	661.6	658.9	681.4	726.4	847.5	1368.3	3100.0	5994.3	9516.5	9606.6	6807.9
75°	540.6	537.8	551.9	565.9	613.8	917.9	1830.1	4513.3	7680.8	7509.1	5107.4
77.5°	456.1	453.3	467.4	470.1	489.9	633.5	1041.8	2970.3	5124.3	4828.6	2877.5
80°	385.8	382.9	399.8	405.4	419.5	464.5	599.8	1607.7	2573.4	2438.2	1374.0
82.5°	290.0	301.3	332.3	346.3	363.2	343.5	371.6	709.5	1193.8	1140.3	596.9
85°	140.8	166.1	250.6	278.8	298.5	216.8	253.4	335.0	537.8	512.4	242.1
87.5°	47.9	42.2	149.2	177.4	194.3	98.5	140.8	185.9	222.4	202.7	76.0
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°	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5	1334.5
2.5°	1348.7	1306.4	1244.4	1196.6	1165.7	1140.3	1129.0	1126.2	1120.5	1117.8	1117.8
5°	1376.8	1300.8	1205.0	1154.4	1140.3	1129.0	1134.7	1137.5	1137.5	1137.5	1137.5
7.5°	1419.0	1312.0	1196.6	1162.8	1160.0	1160.0	1176.9	1185.3	1191.0	1191.0	1191.0
10°	1475.3	1331.8	1210.7	1182.5	1191.0	1196.6	1216.3	1227.5	1233.2	1236.0	1238.8
12.5°	1551.4	1374.0	1238.8	1216.3	1227.5	1230.4	1244.4	1250.1	1255.8	1258.5	1258.5
15°	1652.7	1435.9	1283.9	1255.8	1258.5	1255.8	1255.8	1250.1	1247.3	1247.3	1252.9
17.5°	1756.9	1495.0	1323.3	1283.9	1272.7	1250.1	1233.2	1219.2	1210.7	1205.0	1207.9
20°	1861.1	1548.5	1345.8	1289.5	1258.5	1221.9	1191.0	1171.3	1160.0	1148.8	1154.4
22.5°	1965.3	1599.2	1354.3	1272.7	1227.5	1174.0	1140.3	1109.3	1084.0	1067.0	1069.9
25°	2080.7	1655.5	1354.3	1252.9	1185.3	1129.0	1086.8	1036.1	999.5	985.4	991.0
27.5°	2196.1	1703.4	1340.2	1216.3	1137.5	1081.2	1019.3	960.1	937.5	929.1	931.9
30°	2311.6	1740.0	1309.3	1171.3	1086.8	1024.9	943.2	903.8	875.6	853.1	855.9
32.5°	2427.0	1765.3	1267.0	1114.9	1033.3	954.5	886.9	841.9	791.2	763.0	765.8
35°	2559.3	1785.0	1216.3	1058.7	974.2	892.5	841.9	768.6	715.1	692.6	687.0
37.5°	2697.3	1799.2	1162.8	996.7	915.0	847.5	796.8	706.7	656.0	625.0	622.3
40°	2846.5	1804.8	1098.0	931.9	858.8	819.3	737.6	670.1	582.8	563.1	563.1
42.5°	3023.8	1801.9	1033.3	867.2	796.8	754.5	695.4	664.5	588.4	568.8	557.5
45°	3226.6	1801.9	962.9	791.2	734.9	672.9	647.5	627.9	577.1	585.6	591.3
47.5°	3457.5	1796.3	878.4	729.3	684.1	630.6	616.6	574.4	554.6	560.3	565.9
50°	3775.6	1804.8	802.4	678.5	647.5	602.5	585.6	563.1	554.6	557.5	554.6
52.5°	4217.6	1776.6	729.3	647.5	619.4	560.3	560.3	557.5	560.3	557.5	557.5
55°	4459.8	1714.7	675.8	630.6	599.8	540.6	551.9	557.5	563.1	560.3	560.3
57.5°	4803.3	1672.4	633.5	619.4	588.4	534.9	546.3	557.5	560.3	557.5	557.5
60°	5208.8	1644.3	605.4	622.3	580.0	534.9	549.0	557.5	554.6	551.9	551.9
62.5°	5678.9	1633.0	585.6	630.6	571.5	537.8	549.0	557.5	546.3	543.4	543.4
65°	5856.3	1531.7	560.3	636.3	577.1	537.8	546.3	549.0	534.9	532.1	529.3
67.5°	5583.2	1357.0	523.6	625.0	594.0	537.8	537.8	534.9	518.0	515.3	509.6
70°	4972.3	1126.2	467.4	588.4	605.4	540.6	526.5	512.4	495.5	495.5	484.3
72.5°	4071.2	886.9	394.1	523.6	596.9	549.0	504.0	484.3	464.5	464.5	453.3
75°	2933.8	661.6	315.4	436.4	560.3	546.3	475.8	450.5	428.0	425.1	411.0
77.5°	1672.4	464.5	256.2	340.6	498.4	532.1	450.5	411.0	385.8	377.3	368.9
80°	858.8	312.5	208.4	267.5	413.9	492.8	430.8	366.0	337.9	323.8	309.7
82.5°	408.3	208.4	160.5	197.1	312.5	430.8	405.4	315.4	284.4	267.5	250.6
85°	183.0	123.9	107.0	126.7	222.4	335.0	357.6	259.0	222.4	278.8	205.5
87.5°	59.1	56.3	56.3	59.1	107.0	146.4	261.9	191.5	177.4	146.4	123.9
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)