

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: P265833

Luminaire Tested: **ARCH-M-AF48-130-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265833
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-M-AF48-130-D-U-T2R-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14118.6 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 131
Input Voltage (V): NR
Input Current (A_{in}): 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

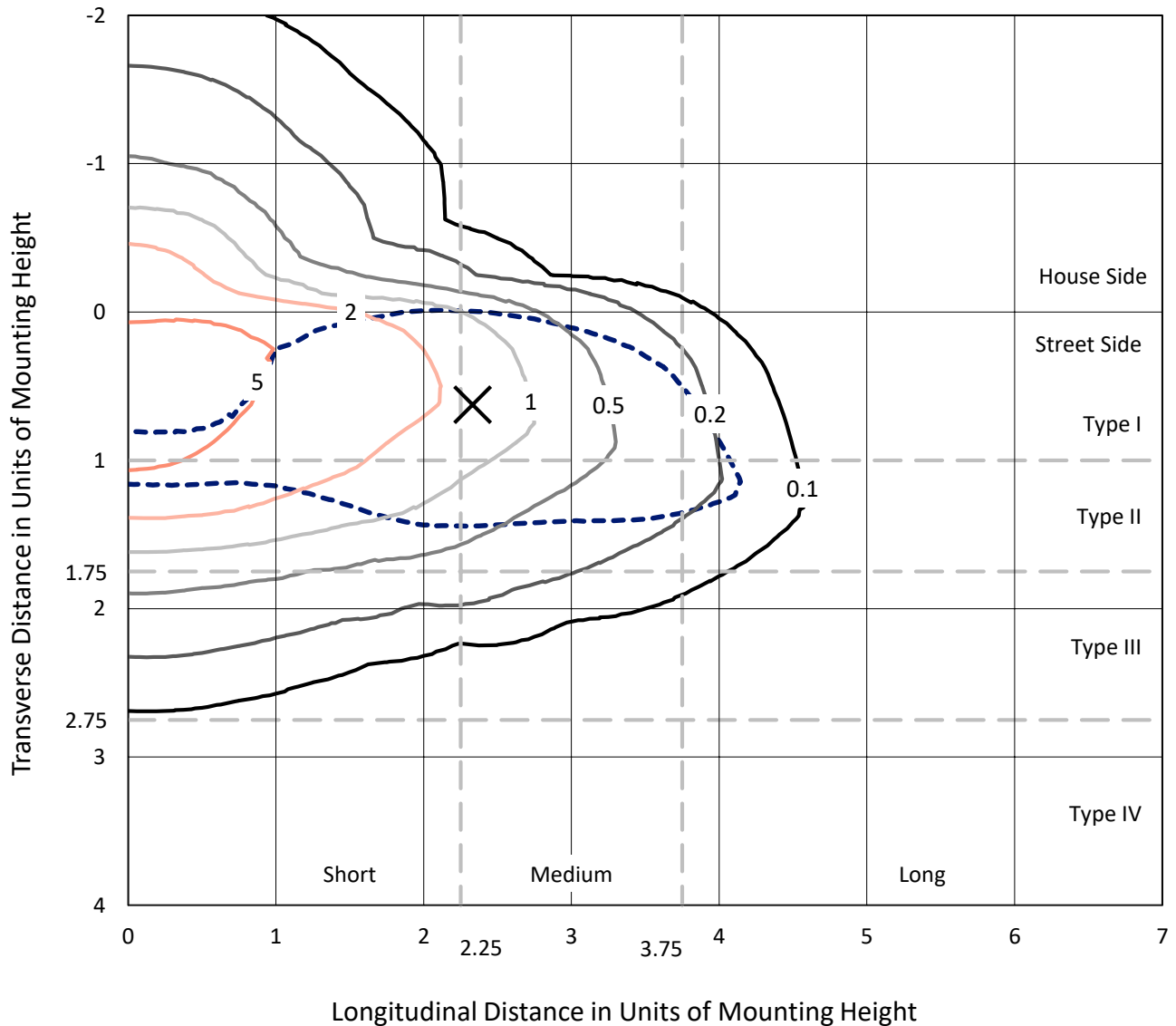


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

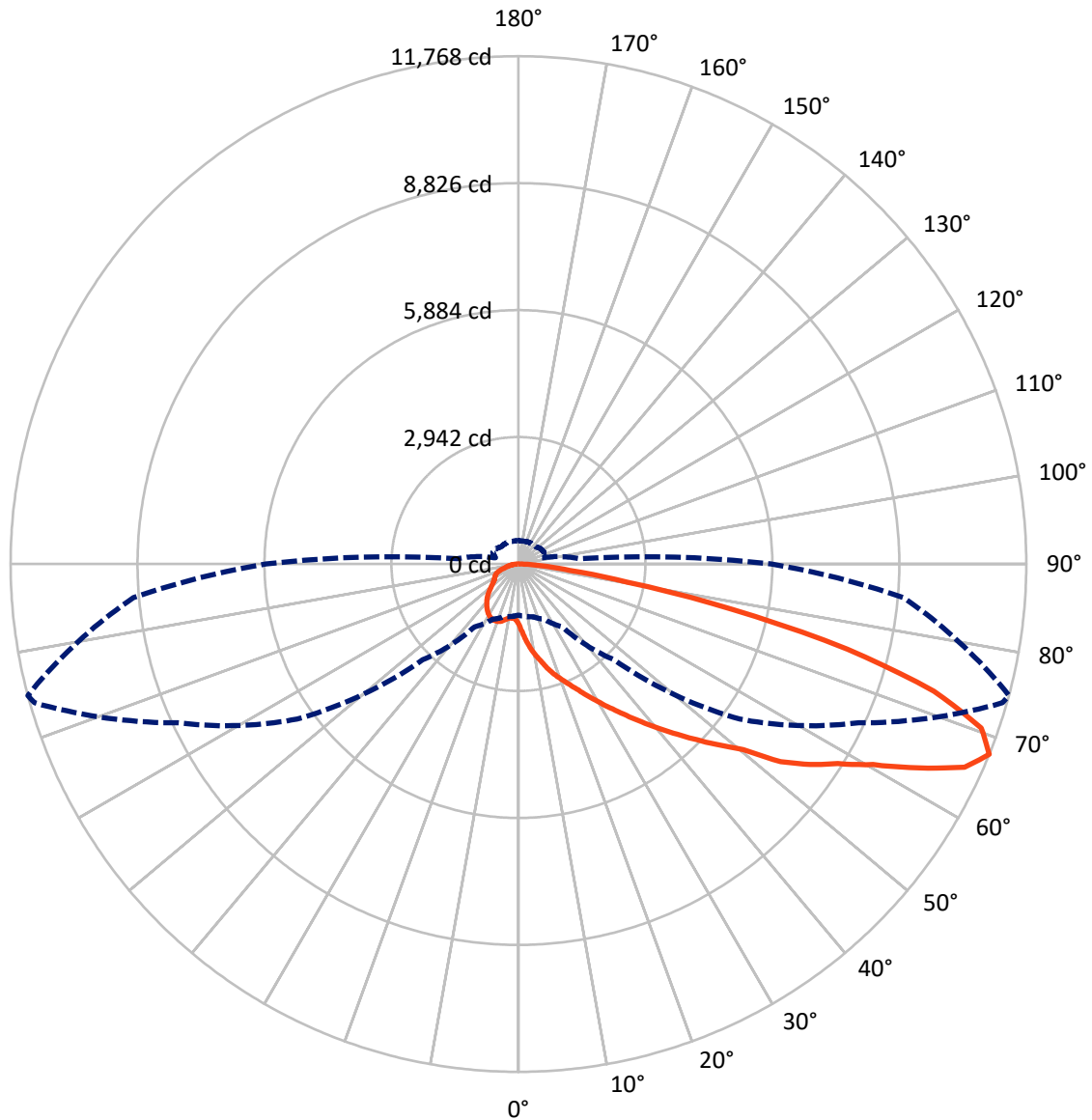


Based on 20 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Medium - Semi-Cutoff

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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	2410.9	0.0	2410.9
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	11707.7	0.0	11707.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	14118.6	0.0	14118.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.4	1.2
10°-20°	594.0	4.2
20°-30°	1083.3	7.7
30°-40°	1778.2	12.6
40°-50°	2571.5	18.2
50°-60°	3030.5	21.5
60°-70°	2944.9	20.9
70°-80°	1637.0	11.6
80°-90°	314.8	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°	14118.6	100.0
0°-180°	14118.6	100.0

Coefficient of Utilization



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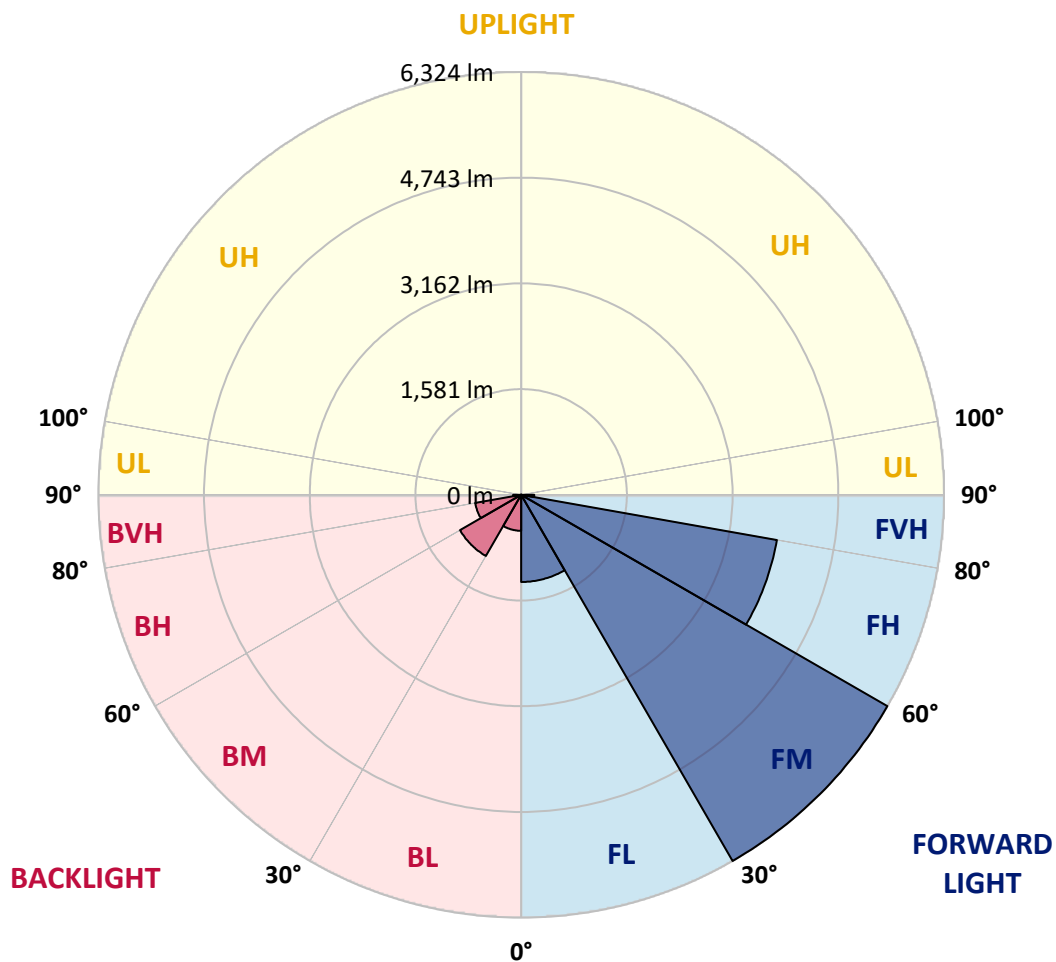
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1303.5	9.2			
FM (30°-60°)	6324.4	44.8			
FH (60°-80°)	3883.9	27.5			G2/5000
FVH (80°-90°)	195.9	1.4			G2/225
BL (0°-30°)	538.1	3.8	B2/1000		
BM (30°-60°)	1055.9	7.5	B2/2500		
BH (60°-80°)	698.1	4.9	B2/1000		G2/1000
BVH (80°-90°)	118.9	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°	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0
2.5°	1983.4	1989.3	1977.4	1950.9	1912.6	1841.7	1779.7	1670.6	1573.1	1561.3	1458.0
5°	2331.7	2337.6	2322.8	2290.4	2249.0	2172.3	2086.8	1945.0	1788.6	1759.2	1540.8
7.5°	2570.8	2573.7	2555.9	2523.6	2491.1	2414.4	2328.8	2169.3	1977.4	1954.0	1647.0
10°	2774.4	2780.3	2756.7	2736.1	2700.7	2623.9	2535.3	2367.2	2169.3	2136.9	1756.1
12.5°	2963.2	2969.2	2954.4	2936.7	2924.9	2854.2	2756.7	2555.9	2343.5	2308.0	1886.0
15°	3090.2	3096.2	3099.2	3122.7	3137.5	3087.2	2989.9	2771.5	2532.4	2500.0	2039.5
17.5°	3054.9	3069.6	3113.9	3199.5	3290.9	3293.8	3214.1	2984.0	2718.4	2682.9	2195.9
20°	2951.6	2963.2	3016.5	3146.4	3326.3	3429.6	3423.8	3199.5	2892.5	2854.2	2340.5
22.5°	3037.1	3051.8	3051.8	3131.5	3308.6	3500.4	3577.2	3411.9	3066.6	3031.2	2485.3
25°	3403.0	3411.9	3350.0	3317.5	3382.5	3559.5	3704.2	3642.2	3279.2	3237.9	2641.6
27.5°	3913.6	3899.0	3822.2	3692.4	3621.4	3668.7	3816.3	3860.6	3524.1	3473.9	2803.9
30°	4421.4	4412.6	4323.9	4149.8	3990.5	3890.1	3940.2	4055.4	3789.7	3730.8	2960.4
32.5°	4896.5	4881.7	4784.5	4580.7	4400.6	4214.8	4117.3	4232.5	4073.1	4005.3	3134.5
35°	5333.3	5295.0	5197.7	4985.1	4799.1	4622.0	4383.0	4400.6	4380.0	4309.2	3326.3
37.5°	5687.6	5658.1	5551.7	5354.1	5156.4	4988.1	4737.2	4592.6	4710.6	4642.7	3547.8
40°	6000.4	5968.0	5858.7	5660.9	5478.0	5318.7	5120.9	4825.8	5082.5	5005.7	3795.7
42.5°	6236.6	6212.9	6124.4	5929.6	5752.4	5607.8	5510.5	5120.9	5469.2	5395.4	4067.2
45°	6363.5	6339.9	6292.5	6136.2	5973.9	5861.7	5870.6	5472.0	5873.5	5811.6	4388.8
47.5°	6207.0	6224.7	6266.0	6236.6	6136.2	6083.1	6192.2	5835.1	6325.1	6266.0	4737.2
50°	5787.9	5805.7	5970.9	6174.6	6210.0	6274.9	6481.5	6254.3	6803.3	6756.1	5168.0
52.5°	4757.9	4855.2	5312.8	5799.6	6133.3	6401.9	6803.3	6877.1	7609.1	7609.1	5929.6
55°	3594.9	3680.5	4203.0	5053.0	5835.1	6413.5	7039.4	7299.1	8190.4	8202.2	6328.0
57.5°	2913.2	2966.3	3223.1	4093.8	5209.5	6266.0	7319.7	7662.2	8674.6	8727.7	6841.6
60°	2364.2	2393.7	2561.8	3167.0	4344.7	5867.5	7520.4	8181.7	9365.1	9438.9	7496.9
62.5°	1900.8	1930.3	2042.4	2405.5	3409.0	5120.9	7485.0	8721.7	10286.0	10407.0	8355.8
65°	1517.1	1549.5	1623.3	1847.6	2526.6	4194.0	7122.0	8999.2	11239.4	11357.5	8925.4
67.5°	1183.5	1213.2	1263.2	1410.8	1779.7	3137.5	6263.2	8706.9	11667.4	11767.6	8954.8
70°	894.4	909.1	950.3	1044.8	1272.1	2083.8	4902.5	7727.0	11283.6	11375.1	8364.6
72.5°	693.6	690.6	714.2	761.6	888.5	1434.5	3249.6	6283.7	9976.0	10070.5	7136.8
75°	566.7	563.7	578.5	593.2	643.5	962.2	1918.5	4731.3	8051.7	7871.7	5354.1
77.5°	478.2	475.3	489.9	492.9	513.7	664.0	1092.1	3113.9	5371.8	5061.8	3016.5
80°	404.3	401.5	419.1	425.0	439.8	487.1	628.6	1685.3	2697.7	2555.9	1440.3
82.5°	303.9	315.8	348.3	363.1	380.7	360.1	389.7	743.7	1251.5	1195.4	625.7
85°	147.6	174.1	262.7	292.2	312.9	227.4	265.5	351.2	563.7	537.1	253.9
87.5°	50.1	44.2	156.5	185.9	203.6	103.3	147.6	194.8	233.2	212.4	79.7
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°	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0	1399.0
2.5°	1413.8	1369.5	1304.6	1254.5	1222.0	1195.4	1183.5	1180.6	1174.8	1171.7	1171.7
5°	1443.2	1363.5	1263.2	1210.1	1195.4	1183.5	1189.4	1192.4	1192.4	1192.4	1192.4
7.5°	1487.6	1375.5	1254.5	1219.0	1216.0	1216.0	1233.7	1242.5	1248.5	1248.5	1248.5
10°	1546.6	1396.1	1269.1	1239.7	1248.5	1254.5	1275.1	1286.8	1292.8	1295.7	1298.7
12.5°	1626.3	1440.3	1298.7	1275.1	1286.8	1289.7	1304.6	1310.4	1316.3	1319.3	1319.3
15°	1732.6	1505.3	1345.9	1316.3	1319.3	1316.3	1316.3	1310.4	1307.6	1307.6	1313.4
17.5°	1841.7	1567.3	1387.3	1345.9	1334.2	1310.4	1292.8	1278.0	1269.1	1263.2	1266.3
20°	1950.9	1623.3	1410.8	1351.8	1319.3	1281.0	1248.5	1227.9	1216.0	1204.2	1210.1
22.5°	2060.2	1676.4	1419.7	1334.2	1286.8	1230.8	1195.4	1162.9	1136.4	1118.6	1121.5
25°	2181.2	1735.4	1419.7	1313.4	1242.5	1183.5	1139.3	1086.1	1047.9	1033.1	1038.9
27.5°	2302.1	1785.7	1404.9	1275.1	1192.4	1133.4	1068.4	1006.6	982.8	974.0	976.9
30°	2423.2	1824.0	1372.4	1227.9	1139.3	1074.4	988.8	947.4	917.9	894.4	897.2
32.5°	2544.2	1850.6	1328.1	1168.9	1083.1	1000.5	929.7	882.6	829.3	799.9	802.8
35°	2682.9	1871.3	1275.1	1109.8	1021.3	935.7	882.6	805.8	749.6	726.1	720.3
37.5°	2827.5	1886.0	1219.0	1044.8	959.2	888.5	835.2	740.8	687.7	655.3	652.3
40°	2984.0	1891.9	1151.1	976.9	900.2	858.9	773.4	702.5	610.9	590.2	590.2
42.5°	3169.8	1889.0	1083.1	909.1	835.2	791.0	729.1	696.5	616.9	596.3	584.3
45°	3382.5	1889.0	1009.4	829.3	770.3	705.3	678.8	658.2	605.1	613.9	619.8
47.5°	3624.4	1883.0	920.9	764.5	717.1	661.2	646.4	602.1	581.5	587.3	593.2
50°	3958.0	1891.9	841.3	711.3	678.8	631.6	613.9	590.2	581.5	584.3	581.5
52.5°	4421.4	1862.4	764.5	678.8	649.4	587.3	587.3	584.3	587.3	584.3	584.3
55°	4675.1	1797.5	708.4	661.2	628.6	566.7	578.5	584.3	590.2	587.3	587.3
57.5°	5035.3	1753.2	664.0	649.4	616.9	560.8	572.6	584.3	587.3	584.3	584.3
60°	5460.3	1723.7	634.6	652.3	608.1	560.8	575.5	584.3	581.5	578.5	578.5
62.5°	5953.2	1711.9	613.9	661.2	599.2	563.7	575.5	584.3	572.6	569.6	569.6
65°	6139.1	1605.6	587.3	667.0	605.1	563.7	572.6	575.5	560.8	557.8	555.0
67.5°	5852.8	1422.6	549.0	655.3	622.7	563.7	563.7	560.8	543.0	540.2	534.2
70°	5212.3	1180.6	489.9	616.9	634.6	566.7	551.9	537.1	519.5	519.5	507.6
72.5°	4267.8	929.7	413.2	549.0	625.7	575.5	528.4	507.6	487.1	487.1	475.3
75°	3075.4	693.6	330.5	457.4	587.3	572.6	498.7	472.2	448.7	445.6	430.9
77.5°	1753.2	487.1	268.7	357.2	522.5	557.8	472.2	430.9	404.3	395.6	386.6
80°	900.2	327.6	218.4	280.5	433.9	516.5	451.6	383.7	354.2	339.4	324.6
82.5°	428.0	218.4	168.3	206.6	327.6	451.6	425.0	330.5	298.1	280.5	262.7
85°	191.9	129.8	112.2	132.8	233.2	351.2	374.9	271.6	233.2	292.2	215.5
87.5°	62.1	59.0	59.0	62.1	112.2	153.5	274.5	200.7	185.9	153.5	129.8
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)