

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: P265581

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265581
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-AF72-100-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12316.6 lumens
Efficiency: N/A
Efficacy: 120.8 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

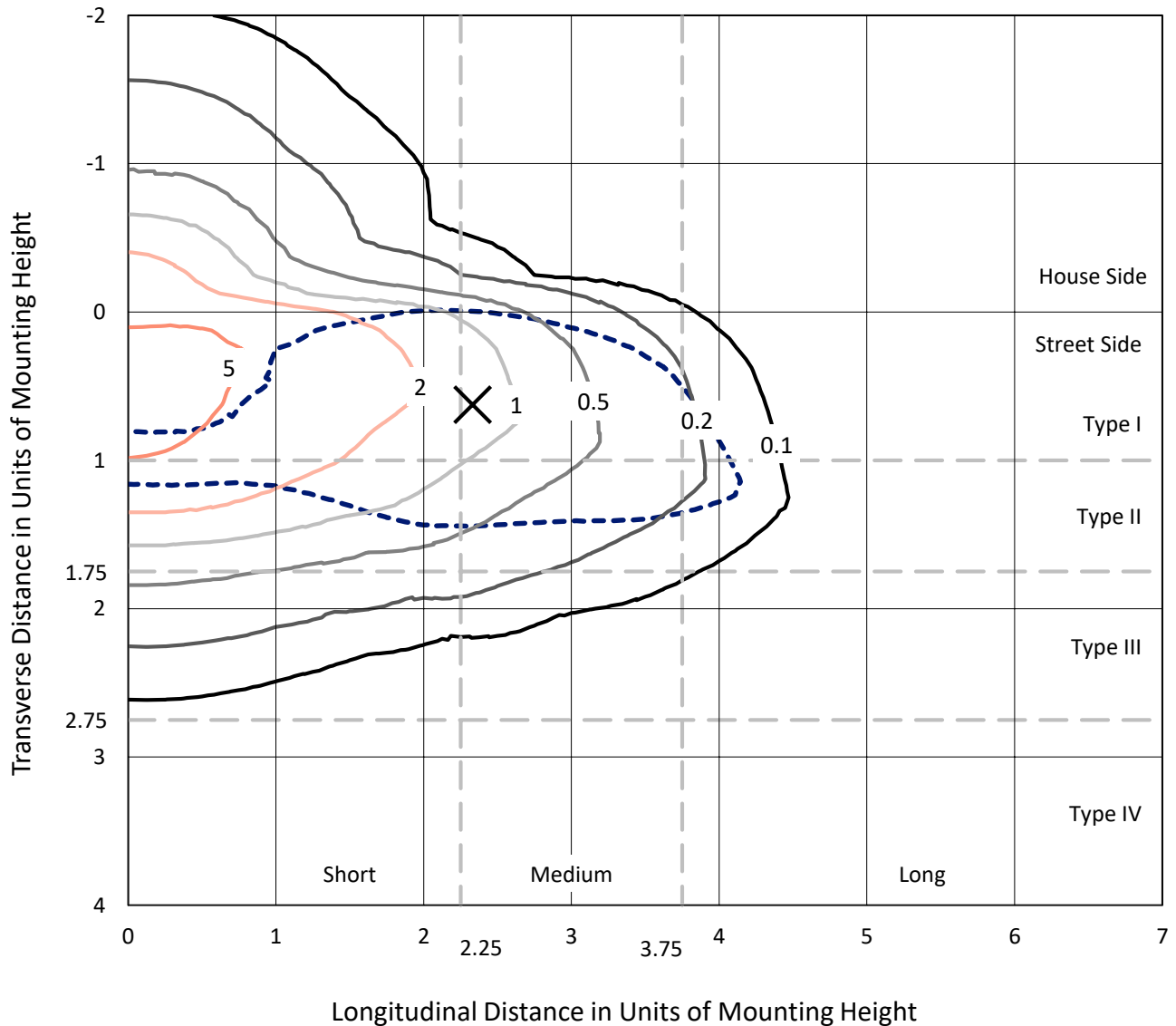
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

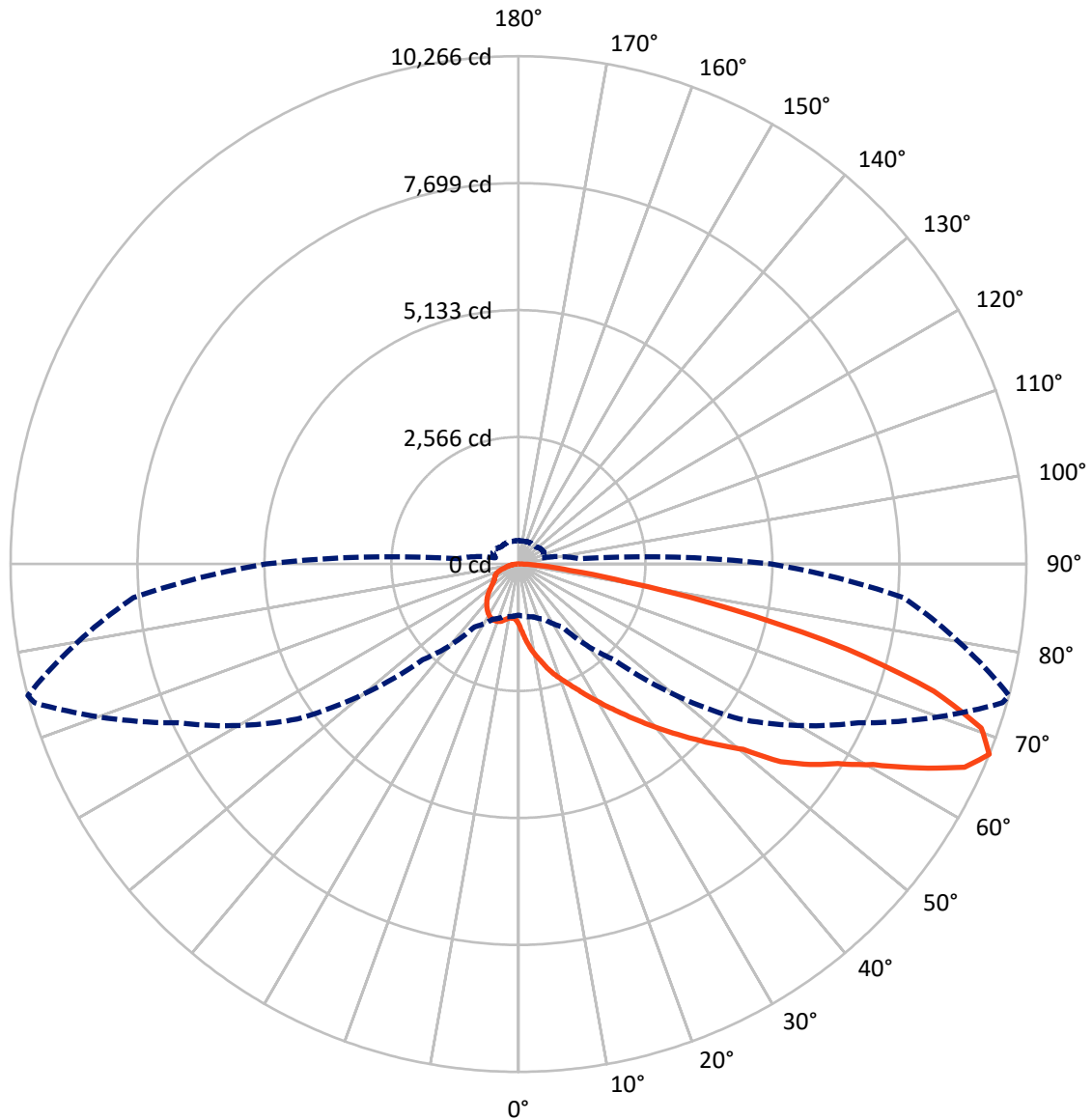
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.4 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	2103.2	0.0	2103.2
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	10213.4	0.0	10213.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	12316.6	0.0	12316.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.4	1.2
10°-20°	518.2	4.2
20°-30°	945.1	7.7
30°-40°	1551.2	12.6
40°-50°	2243.3	18.2
50°-60°	2643.8	21.5
60°-70°	2569.1	20.9
70°-80°	1428.1	11.6
80°-90°	274.6	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°	12316.6	100.0
0°-180°	12316.6	100.0

Coefficient of Utilization



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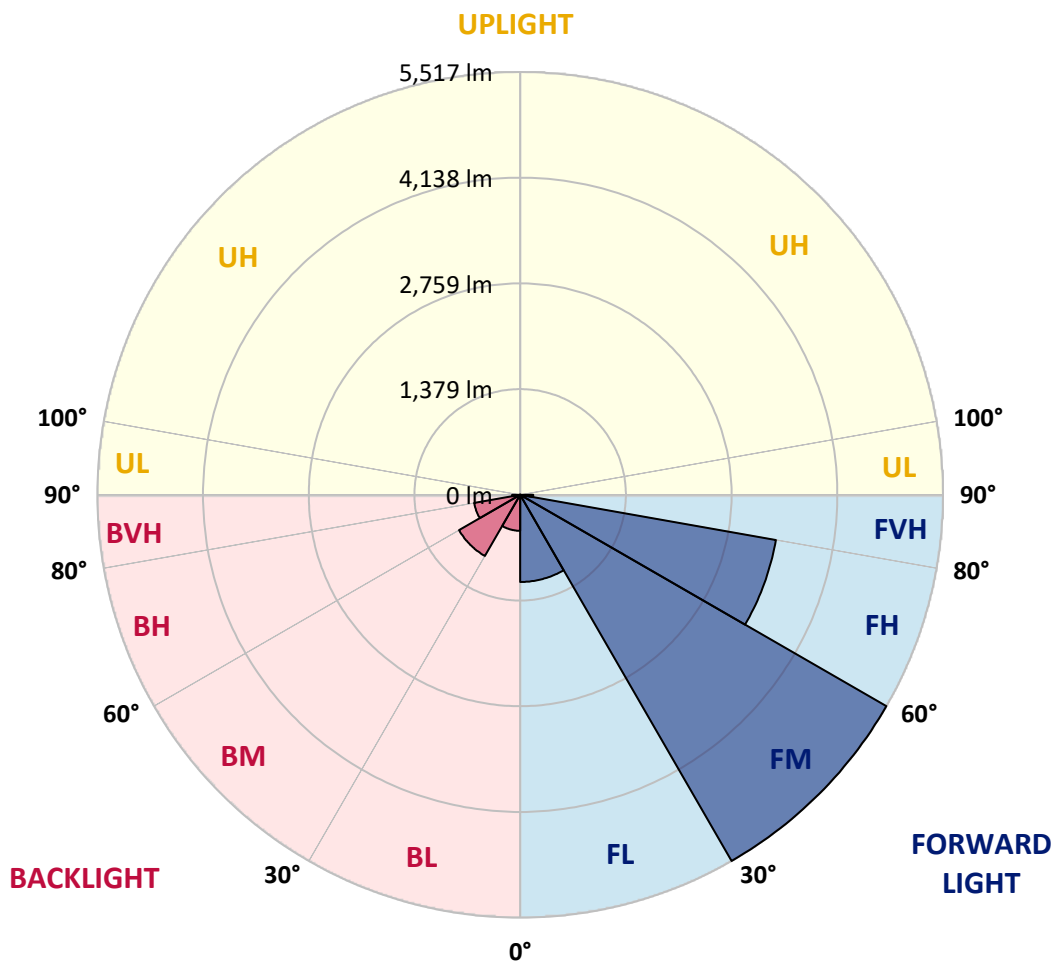
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1137.1	9.2			
FM (30°-60°)	5517.2	44.8			
FH (60°-80°)	3388.2	27.5			G2/5000
FVH (80°-90°)	170.9	1.4			G2/225
BL (0°-30°)	469.4	3.8	B1/500		
BM (30°-60°)	921.1	7.5	B1/1000		
BH (60°-80°)	609.0	4.9	B2/1000		G2/1000
BVH (80°-90°)	103.7	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°	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1730.2	1735.4	1725.1	1702.0	1668.5	1606.7	1552.6	1457.3	1372.4	1362.1	1272.0
5°	2034.1	2039.2	2026.3	1998.0	1962.0	1895.1	1820.3	1696.8	1560.4	1534.6	1344.0
7.5°	2242.7	2245.3	2229.8	2201.4	2173.1	2106.2	2031.4	1892.5	1725.1	1704.5	1436.7
10°	2420.4	2425.5	2404.9	2386.8	2356.0	2289.1	2211.7	2065.1	1892.5	1864.2	1532.0
12.5°	2585.1	2590.3	2577.3	2562.0	2551.6	2489.8	2404.9	2229.8	2044.5	2013.6	1645.2
15°	2695.9	2700.9	2703.5	2724.1	2737.0	2693.3	2608.3	2417.8	2209.2	2180.8	1779.3
17.5°	2664.9	2677.8	2716.5	2791.0	2871.0	2873.5	2804.0	2603.1	2371.3	2340.5	1915.6
20°	2574.8	2585.1	2631.4	2744.7	2901.9	2992.0	2986.8	2791.0	2523.2	2489.8	2041.8
22.5°	2649.6	2662.3	2662.3	2731.8	2886.3	3053.7	3120.6	2976.4	2675.2	2644.3	2168.0
25°	2968.8	2976.4	2922.4	2894.1	2950.8	3105.3	3231.4	3177.3	2860.7	2824.5	2304.4
27.5°	3414.2	3401.3	3334.4	3221.1	3159.2	3200.5	3329.2	3367.8	3074.3	3030.5	2446.1
30°	3857.1	3849.3	3772.2	3620.2	3481.1	3393.5	3437.4	3537.7	3306.0	3254.6	2582.5
32.5°	4271.6	4258.8	4173.7	3996.1	3839.0	3676.9	3591.9	3692.3	3553.2	3494.0	2734.4
35°	4652.7	4619.2	4534.3	4348.9	4186.6	4032.1	3823.5	3839.0	3821.0	3759.1	2901.9
37.5°	4961.7	4935.8	4843.2	4670.6	4498.2	4351.4	4132.6	4006.4	4109.3	4050.2	3094.9
40°	5234.6	5206.2	5110.9	4938.4	4778.9	4639.7	4467.4	4209.7	4433.9	4366.9	3311.2
42.5°	5440.6	5420.0	5342.7	5172.8	5018.3	4892.1	4807.2	4467.4	4771.1	4706.7	3548.0
45°	5551.3	5530.7	5489.5	5353.0	5211.3	5113.5	5121.2	4773.7	5123.8	5069.8	3828.8
47.5°	5414.9	5430.3	5466.2	5440.6	5353.0	5306.6	5402.0	5090.3	5517.7	5466.2	4132.6
50°	5049.3	5064.6	5208.8	5386.4	5417.4	5474.0	5654.2	5455.9	5934.9	5893.7	4508.5
52.5°	4150.6	4235.6	4634.6	5059.4	5350.5	5584.8	5934.9	5999.3	6637.8	6637.8	5172.8
55°	3136.2	3210.8	3666.5	4408.1	5090.3	5595.1	6141.0	6367.5	7145.1	7155.4	5520.4
57.5°	2541.3	2587.7	2811.7	3571.2	4544.5	5466.2	6385.5	6684.2	7567.3	7613.7	5968.3
60°	2062.4	2088.2	2235.0	2762.7	3790.0	5118.7	6560.6	7137.4	8169.8	8234.3	6540.0
62.5°	1658.2	1684.0	1781.8	2098.5	2973.8	4467.4	6529.7	7608.6	8973.2	9078.7	7289.2
65°	1323.5	1351.8	1416.2	1611.7	2204.0	3658.7	6212.9	7850.6	9804.8	9907.9	7786.1
67.5°	1032.5	1058.3	1102.0	1230.8	1552.6	2737.0	5463.8	7595.7	10178.2	10265.7	7811.9
70°	780.2	793.1	829.0	911.5	1109.8	1817.8	4276.7	6740.8	9843.4	9923.2	7297.0
72.5°	605.1	602.6	623.2	664.2	775.0	1251.3	2834.8	5481.7	8702.8	8785.2	6225.9
75°	494.3	491.8	504.7	517.6	561.4	839.3	1673.6	4127.4	7024.0	6867.1	4670.6
77.5°	417.2	414.6	427.5	430.0	448.1	579.3	952.7	2716.5	4686.2	4415.8	2631.4
80°	352.8	350.2	365.6	370.8	383.7	424.9	548.4	1470.3	2353.4	2229.8	1256.5
82.5°	265.2	275.5	303.8	316.7	332.2	314.1	339.9	648.8	1091.7	1042.8	545.9
85°	128.7	152.0	229.2	254.8	272.9	198.3	231.8	306.4	491.8	468.6	221.4
87.5°	43.7	38.6	136.5	162.2	177.7	90.1	128.7	169.9	203.3	185.4	69.4
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°	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4	1220.4
2.5°	1233.4	1194.7	1138.1	1094.2	1066.0	1042.8	1032.5	1029.9	1024.7	1022.2	1022.2
5°	1259.1	1189.5	1102.0	1055.7	1042.8	1032.5	1037.6	1040.1	1040.1	1040.1	1040.1
7.5°	1297.7	1199.9	1094.2	1063.5	1060.8	1060.8	1076.3	1084.0	1089.1	1089.1	1089.1
10°	1349.3	1217.9	1107.3	1081.4	1089.1	1094.2	1112.3	1122.6	1127.7	1130.3	1132.9
12.5°	1418.8	1256.5	1132.9	1112.3	1122.6	1125.1	1138.1	1143.3	1148.4	1151.0	1151.0
15°	1511.4	1313.1	1174.2	1148.4	1151.0	1148.4	1148.4	1143.3	1140.7	1140.7	1145.8
17.5°	1606.7	1367.2	1210.1	1174.2	1163.8	1143.3	1127.7	1114.8	1107.3	1102.0	1104.6
20°	1702.0	1416.2	1230.8	1179.3	1151.0	1117.4	1089.1	1071.0	1060.8	1050.5	1055.7
22.5°	1797.1	1462.5	1238.5	1163.8	1122.6	1073.7	1042.8	1014.5	991.3	975.9	978.4
25°	1902.8	1514.0	1238.5	1145.8	1084.0	1032.5	993.9	947.5	914.0	901.2	906.3
27.5°	2008.3	1557.8	1225.6	1112.3	1040.1	988.8	932.1	878.1	857.4	849.6	852.2
30°	2113.9	1591.2	1197.4	1071.0	993.9	937.2	862.6	826.5	800.7	780.2	782.8
32.5°	2219.5	1614.4	1158.6	1019.7	944.9	872.9	811.1	769.8	723.6	697.8	700.4
35°	2340.5	1632.4	1112.3	968.2	890.8	816.2	769.8	703.0	654.0	633.5	628.3
37.5°	2466.7	1645.2	1063.5	911.5	836.9	775.0	728.6	646.3	599.9	571.6	569.0
40°	2603.1	1650.5	1004.1	852.2	785.3	749.2	674.5	612.9	533.0	515.0	515.0
42.5°	2765.3	1647.9	944.9	793.1	728.6	690.1	636.0	607.7	538.2	520.1	509.8
45°	2950.8	1647.9	880.6	723.6	672.0	615.3	592.3	574.1	527.8	535.6	540.7
47.5°	3161.9	1642.7	803.4	666.9	625.7	576.7	563.9	525.2	507.3	512.5	517.6
50°	3452.8	1650.5	733.8	620.5	592.3	551.0	535.6	515.0	507.3	509.8	507.3
52.5°	3857.1	1624.8	666.9	592.3	566.4	512.5	512.5	509.8	512.5	509.8	509.8
55°	4078.5	1568.0	617.9	576.7	548.4	494.3	504.7	509.8	515.0	512.5	512.5
57.5°	4392.6	1529.5	579.3	566.4	538.2	489.1	499.5	509.8	512.5	509.8	509.8
60°	4763.4	1503.8	553.5	569.0	530.4	489.1	502.2	509.8	507.3	504.7	504.7
62.5°	5193.5	1493.4	535.6	576.7	522.6	491.8	502.2	509.8	499.5	496.9	496.9
65°	5355.5	1400.6	512.5	581.9	527.8	491.8	499.5	502.2	489.1	486.6	484.0
67.5°	5105.8	1241.1	478.8	571.6	543.3	491.8	491.8	489.1	473.8	471.3	466.0
70°	4547.1	1029.9	427.5	538.2	553.5	494.3	481.5	468.6	453.1	453.1	442.9
72.5°	3723.1	811.1	360.5	478.8	545.9	502.2	460.9	442.9	424.9	424.9	414.6
75°	2683.0	605.1	288.4	399.0	512.5	499.5	435.1	412.0	391.4	388.7	375.9
77.5°	1529.5	424.9	234.3	311.5	455.7	486.6	412.0	375.9	352.8	344.9	337.4
80°	785.3	285.8	190.5	244.6	378.5	450.6	393.9	334.7	308.9	296.1	283.2
82.5°	373.3	190.5	146.8	180.2	285.8	393.9	370.8	288.4	260.1	244.6	229.2
85°	167.4	113.2	97.8	115.9	203.3	306.4	327.1	237.0	203.3	254.8	187.9
87.5°	54.1	51.6	51.6	54.1	97.8	133.8	239.5	175.1	162.2	133.8	113.2
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)