

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: P265657

Luminaire Tested: **ARCH-L-AF72-180-D-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265657
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T3-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19554.1 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G3

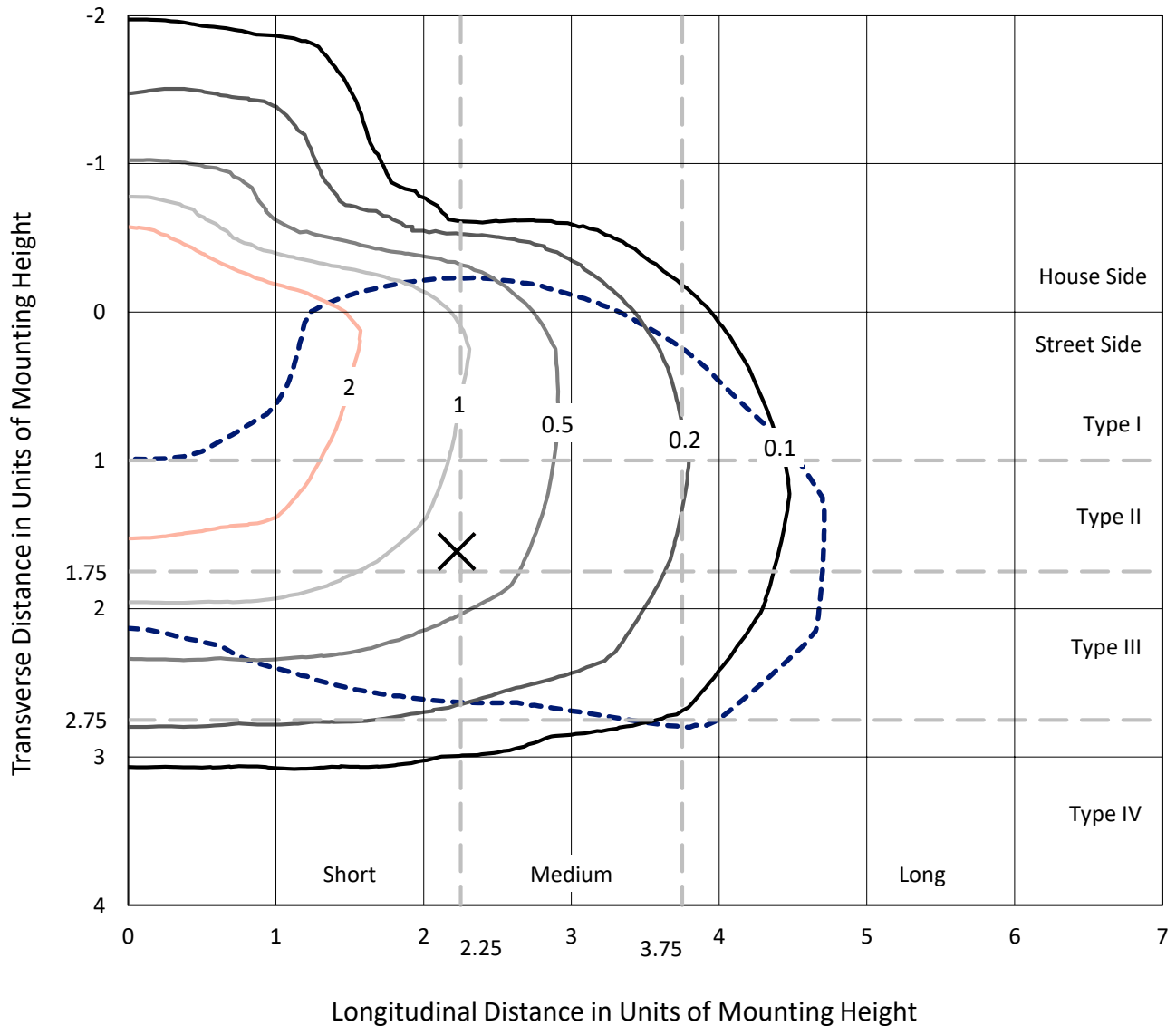
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

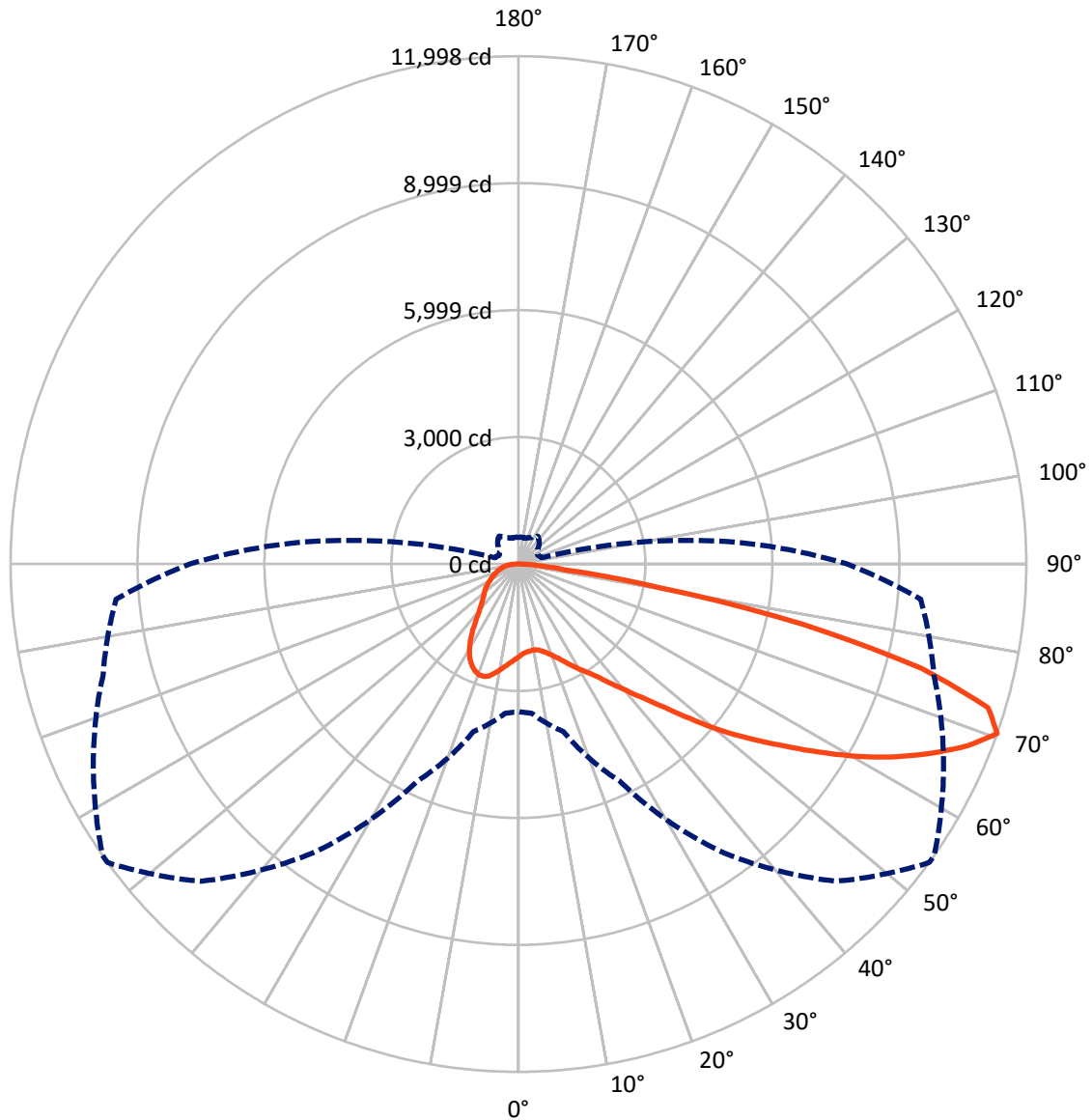


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4434.8	0.0	4434.8
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	15119.3	0.0	15119.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	19554.1	0.0	19554.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.7	1.1
10°-20°	686.0	3.5
20°-30°	1191.8	6.1
30°-40°	1741.7	8.9
40°-50°	2733.6	14.0
50°-60°	4203.6	21.5
60°-70°	5135.8	26.3
70°-80°	3184.2	16.3
80°-90°	462.6	2.4
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°	19554.1	100.0
0°-180°	19554.1	100.0



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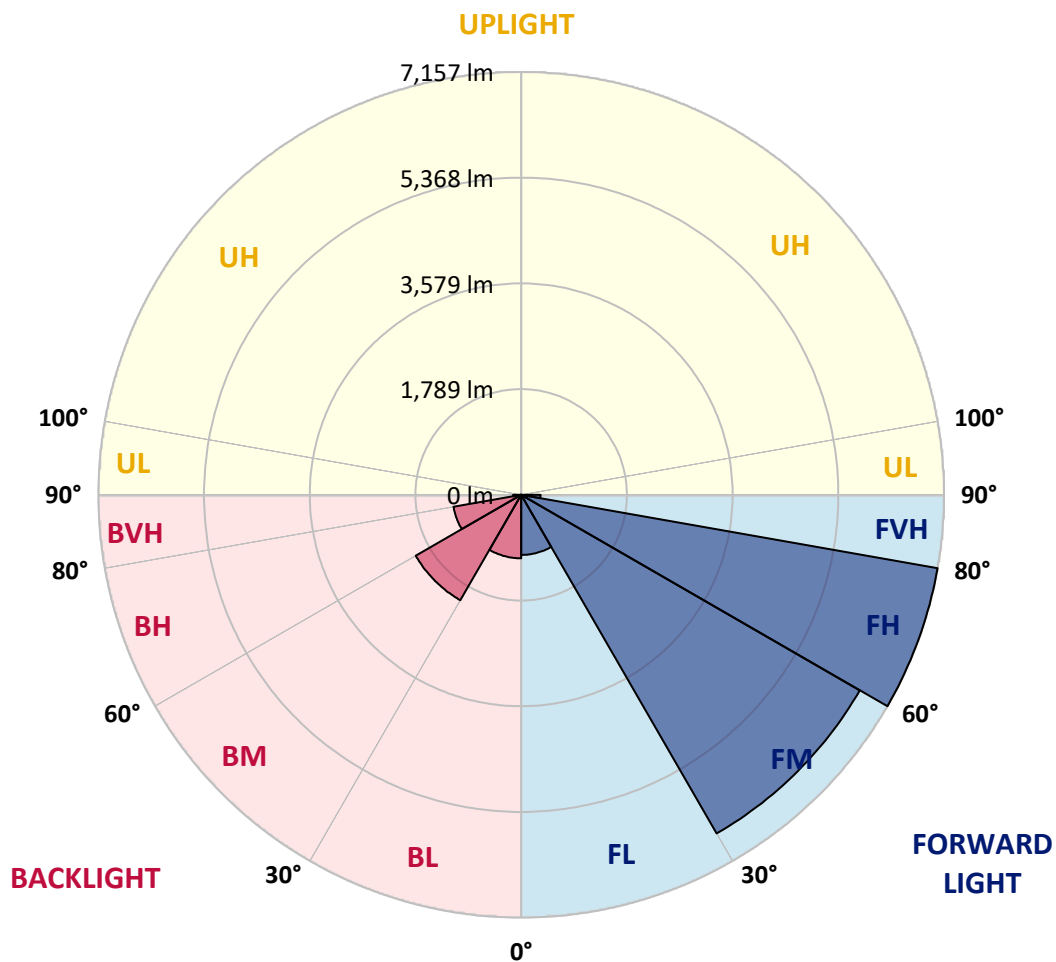
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1017.4	5.2			
FM	(30°-60°)	6618.1	33.8			
FH	(60°-80°)	7157.1	36.6			G3/7500
FVH	(80°-90°)	326.6	1.7			G3/500
BL	(0°-30°)	1075.2	5.5	B3/2500		
BM	(30°-60°)	2060.8	10.5	B2/2500		
BH	(60°-80°)	1162.9	5.9	B3/2500		G3/2500
BVH	(80°-90°)	135.9	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7
2.5°	2101.8	2094.6	2094.6	2105.4	2109.0	2119.7	2119.7	2123.2	2134.1	2151.9	2173.4
5°	2037.4	2033.8	2037.4	2051.6	2058.8	2080.3	2087.4	2091.1	2112.5	2141.2	2173.4
7.5°	1972.9	1969.3	1976.5	1997.9	2019.4	2051.6	2069.5	2073.1	2105.4	2144.8	2187.7
10°	1951.4	1947.9	1958.6	1976.5	1997.9	2033.8	2062.4	2065.9	2112.5	2159.0	2219.9
12.5°	1980.0	1976.5	1987.2	2005.0	2026.5	2051.6	2083.9	2087.4	2148.3	2209.2	2273.6
15°	2051.6	2051.6	2055.2	2065.9	2087.4	2109.0	2137.5	2141.2	2205.6	2277.3	2341.6
17.5°	2162.6	2155.5	2155.5	2151.9	2166.3	2177.0	2212.7	2216.4	2284.4	2348.8	2413.2
20°	2298.8	2295.1	2280.7	2262.9	2259.2	2266.5	2302.3	2305.9	2374.0	2427.6	2488.5
22.5°	2463.4	2466.9	2434.8	2395.4	2377.5	2388.2	2420.5	2424.0	2474.1	2520.7	2574.5
25°	2681.8	2671.1	2624.5	2567.3	2531.5	2531.5	2563.7	2563.7	2610.3	2638.9	2674.7
27.5°	2889.5	2868.0	2825.0	2742.6	2685.5	2696.2	2728.3	2728.3	2771.4	2782.1	2799.9
30°	3115.1	3093.6	3039.9	2936.0	2860.8	2853.6	2893.1	2889.5	2946.8	2943.1	2928.8
32.5°	3390.7	3380.1	3290.5	3158.0	3057.8	3032.7	3068.5	3072.2	3107.9	3097.1	3050.6
35°	3777.5	3773.9	3691.6	3458.8	3326.3	3279.7	3301.2	3301.2	3326.3	3297.7	3218.8
37.5°	4264.4	4271.6	4199.9	3856.2	3670.0	3591.2	3594.8	3591.2	3598.4	3566.2	3483.8
40°	4751.3	4769.3	4765.7	4350.3	4114.1	3978.0	3927.8	3920.7	3938.6	3924.2	3845.5
42.5°	5392.3	5435.3	5335.0	4959.1	4694.1	4464.9	4328.8	4311.0	4350.3	4368.3	4293.1
45°	6058.3	6043.9	5886.5	5614.2	5374.4	5080.8	4823.0	4794.3	4823.0	4876.7	4797.8
47.5°	6405.5	6394.9	6355.5	6219.3	6183.6	5847.0	5456.8	5431.6	5378.0	5453.2	5360.0
50°	6978.5	6989.3	6828.0	6813.7	6964.1	6777.9	6172.9	6115.5	6018.9	6079.8	6000.9
52.5°	7393.8	7347.2	7246.9	7372.3	7841.3	7741.1	6846.0	6820.9	6731.4	6717.0	6681.2
55°	7562.1	7562.1	7580.0	7870.1	8539.6	8407.1	7576.5	7601.5	7479.7	7379.4	7426.0
57.5°	7612.1	7633.6	7787.6	8267.5	9359.5	8926.3	8382.1	8417.8	8242.4	8041.8	8188.7
60°	7365.2	7429.6	7798.4	8493.0	9821.3	9477.7	9230.7	9241.4	8987.2	8693.5	8951.3
62.5°	6731.4	6810.2	7469.0	8586.1	9746.3	10043.4	10032.6	10057.8	9710.4	9345.2	9667.4
65°	5954.4	6033.1	6735.0	8324.8	9688.8	10447.9	10766.6	10834.6	10387.1	9896.5	10114.9
67.5°	4812.2	4916.1	5582.1	7444.0	9409.7	10781.0	11454.1	11525.8	10909.8	10183.0	10075.6
70°	3487.4	3537.5	4096.1	5657.3	8271.1	10598.4	11998.3	11994.8	11081.8	10161.5	9538.6
72.5°	1679.3	1718.6	2202.0	3512.6	5915.0	8994.3	11604.6	11672.5	10845.4	9850.0	8310.4
75°	691.1	730.4	891.6	1482.4	3104.4	5943.6	9835.7	9996.9	9850.0	8840.3	6502.2
77.5°	429.7	444.0	522.8	766.3	1417.9	2775.0	6885.4	7103.7	7805.6	7082.2	4293.1
80°	322.2	333.0	390.3	537.0	895.2	1024.1	3419.4	3695.1	4729.8	4063.9	1944.2
82.5°	268.6	272.1	311.5	390.3	608.7	587.2	1095.7	1220.9	2205.6	1550.4	669.5
85°	250.6	257.9	279.4	279.4	386.7	368.8	454.7	476.2	640.9	529.9	232.8
87.5°	128.8	121.7	247.0	218.4	200.5	179.0	193.3	207.7	239.8	254.2	103.8
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°	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7	2187.7
2.5°	2180.5	2191.2	2209.2	2227.1	2248.5	2273.6	2288.0	2305.9	2320.2	2313.0	2309.5
5°	2191.2	2209.2	2248.5	2284.4	2327.4	2377.5	2409.8	2445.5	2474.1	2481.3	2470.6
7.5°	2209.2	2241.5	2295.1	2359.6	2416.9	2481.3	2531.5	2581.5	2617.4	2624.5	2624.5
10°	2252.1	2288.0	2359.6	2445.5	2513.5	2581.5	2638.9	2678.2	2710.5	2724.7	2724.7
12.5°	2313.0	2356.0	2442.0	2545.7	2621.0	2685.5	2717.6	2735.5	2749.8	2764.2	2767.8
15°	2384.6	2431.3	2534.9	2646.0	2724.7	2757.0	2757.0	2753.5	2753.5	2760.6	2767.8
17.5°	2456.2	2506.5	2613.8	2731.9	2782.1	2764.2	2739.1	2728.3	2721.1	2717.6	2728.3
20°	2531.5	2581.5	2688.9	2799.9	2785.6	2710.5	2674.7	2649.6	2628.1	2617.4	2631.7
22.5°	2613.8	2660.3	2771.4	2846.5	2739.1	2624.5	2556.4	2517.1	2481.3	2459.7	2474.1
25°	2710.5	2757.0	2864.4	2860.8	2656.7	2495.6	2388.2	2323.7	2284.4	2262.9	2262.9
27.5°	2825.0	2864.4	2968.3	2825.0	2542.2	2323.7	2166.3	2105.4	2094.6	2076.7	2076.7
30°	2943.1	2975.5	3064.9	2742.6	2384.6	2098.3	1926.3	1897.7	1901.3	1883.3	1886.9
32.5°	3064.9	3097.1	3122.1	2621.0	2180.5	1844.0	1729.3	1707.9	1704.4	1690.0	1675.7
35°	3236.9	3283.3	3129.3	2456.2	1933.5	1632.7	1550.4	1528.8	1507.4	1457.3	1457.3
37.5°	3498.2	3548.3	3111.5	2252.1	1679.3	1468.0	1392.8	1364.2	1328.4	1278.3	1260.3
40°	3856.2	3856.2	3072.2	2023.1	1475.1	1335.5	1263.9	1228.2	1188.7	1138.6	1127.8
42.5°	4278.7	4178.5	3011.2	1790.2	1324.8	1245.9	1181.6	1142.1	1095.7	1038.4	1031.2
45°	4772.9	4500.7	2925.3	1582.6	1213.8	1192.3	1153.0	1085.0	1006.1	945.2	934.5
47.5°	5252.6	4790.8	2843.0	1435.9	1120.7	1170.9	1138.6	1024.1	916.6	830.8	820.0
50°	5778.9	5048.6	2746.3	1314.0	1049.1	1156.5	1120.7	934.5	816.4	755.5	748.4
52.5°	6305.4	5309.9	2642.5	1185.1	988.2	1127.8	1077.7	870.1	812.7	730.4	719.7
55°	6860.3	5614.2	2520.7	1041.9	916.6	1070.6	1020.5	866.4	837.8	730.4	705.3
57.5°	7401.0	5950.8	2323.7	902.3	837.8	984.6	998.9	844.9	784.1	723.2	694.6
60°	7998.9	6308.8	1997.9	784.1	769.8	913.0	970.3	798.5	723.2	701.8	687.5
62.5°	8478.7	6631.2	1561.2	701.8	712.5	855.7	934.5	769.8	698.3	680.2	676.8
65°	8686.4	6638.4	1120.7	630.3	655.3	802.0	898.8	744.8	676.8	669.5	666.0
67.5°	8468.0	6273.0	787.8	562.1	594.4	751.9	852.1	719.7	655.3	658.7	651.7
70°	7762.7	5503.2	576.4	497.8	537.0	698.3	802.0	687.5	630.3	637.3	626.6
72.5°	6495.0	4289.4	461.9	444.0	490.6	640.9	751.9	651.7	590.7	594.4	572.8
75°	4797.8	2843.0	386.7	397.4	436.8	587.2	687.5	605.1	547.8	533.6	519.2
77.5°	2853.6	1460.9	318.7	347.4	390.3	522.8	615.9	547.8	501.3	476.2	465.5
80°	1177.9	590.7	261.3	293.6	340.2	465.5	544.3	479.8	447.5	422.6	408.2
82.5°	469.0	290.1	207.7	239.8	286.4	404.5	476.2	422.6	390.3	372.3	333.0
85°	179.0	143.2	139.6	168.3	214.9	311.5	393.8	354.6	329.4	282.8	272.1
87.5°	71.7	64.5	64.5	82.4	121.7	196.9	282.8	247.0	257.9	204.1	207.7
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)