

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: P236847

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236847
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-AF72-140-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19483.1 lumens
Efficiency: N/A
Efficacy: 136.2 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 - G3

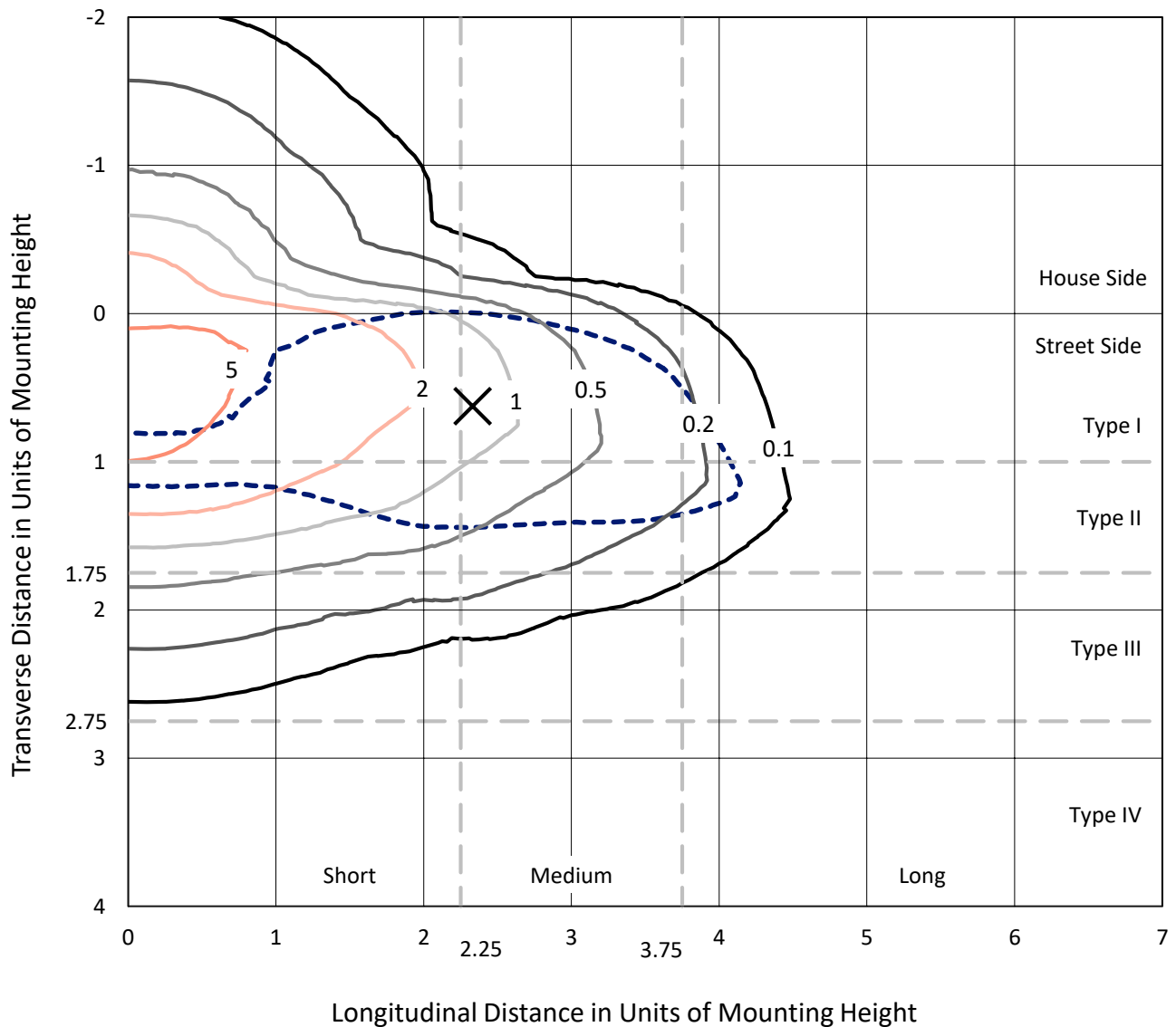
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

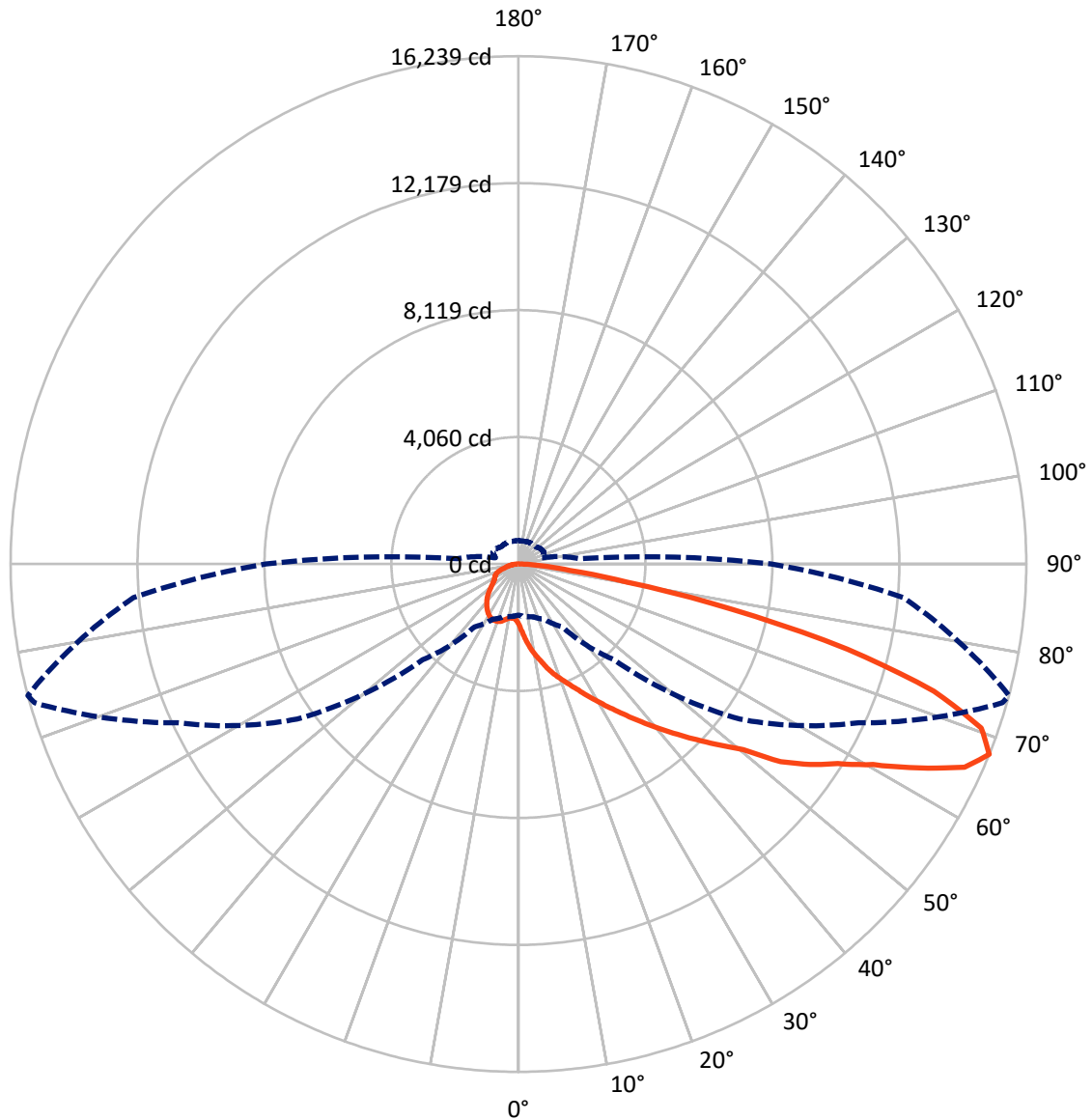


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Medium - Semi-Cutoff

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CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R

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	3327.0	0.0	3327.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	16156.1	0.0	16156.1
	% Fixture	82.9	0.0	82.9
Total	Lumens	19483.1	0.0	19483.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.8	1.2
10°-20°	819.6	4.2
20°-30°	1495.0	7.7
30°-40°	2453.8	12.6
40°-50°	3548.6	18.2
50°-60°	4182.0	21.5
60°-70°	4063.9	20.9
70°-80°	2259.0	11.6
80°-90°	434.4	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°	19483.1	100.0
0°-180°	19483.1	100.0

Coefficient of Utilization



REPORT NUMBER: P236847

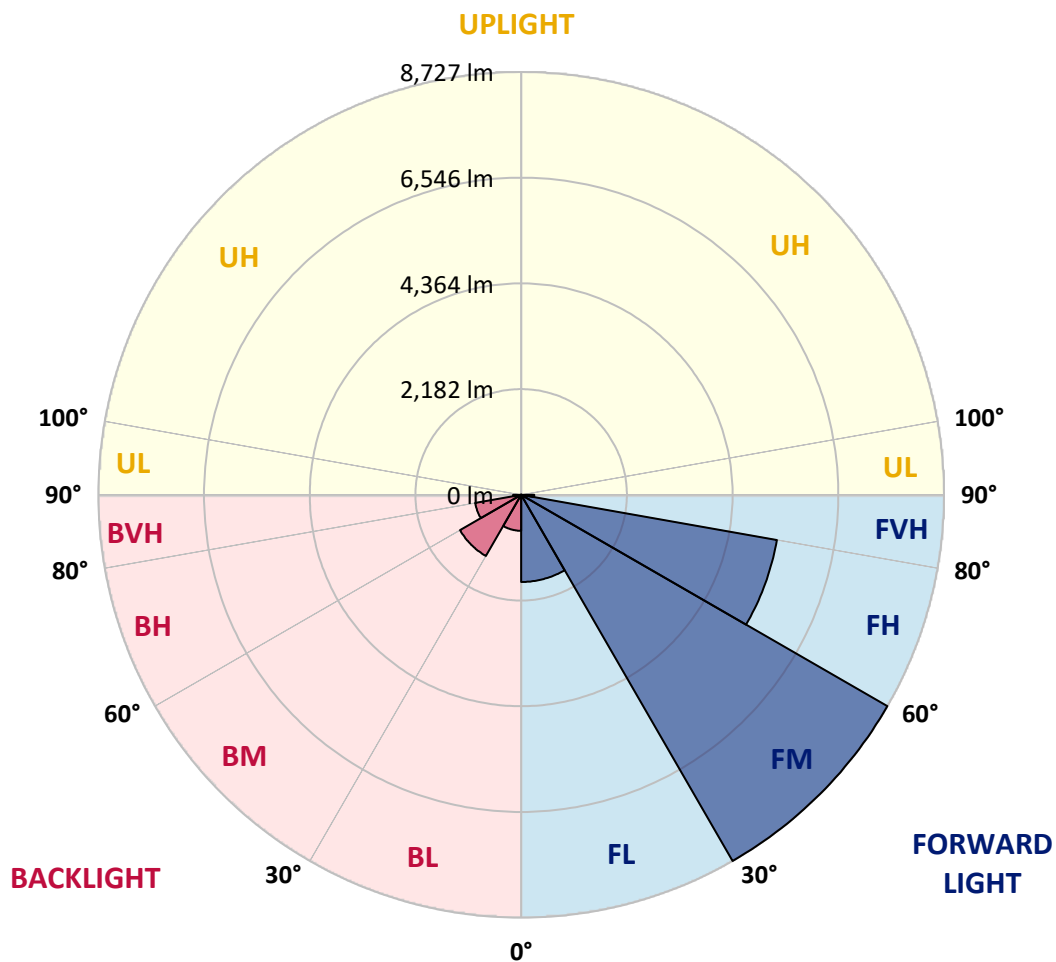
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1798.8	9.2			
FM (30°-60°)	8727.4	44.8			
FH (60°-80°)	5359.6	27.5			G3/7500
FVH (80°-90°)	270.3	1.4			G3/500
BL (0°-30°)	742.6	3.8	B2/1000		
BM (30°-60°)	1457.1	7.5	B2/2500		
BH (60°-80°)	963.3	4.9	B2/1000		G2/1000
BVH (80°-90°)	164.0	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-G3

Type II Medium





REPORT NUMBER: P236847

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6
2.5°	2737.0	2745.2	2728.9	2692.2	2639.3	2541.5	2456.0	2305.3	2170.9	2154.6	2012.0
5°	3217.7	3225.8	3205.4	3160.6	3103.6	2997.7	2879.6	2684.1	2468.2	2427.5	2126.1
7.5°	3547.6	3551.6	3527.2	3482.4	3437.6	3331.6	3213.6	2993.7	2728.9	2696.3	2272.7
10°	3828.6	3836.8	3804.1	3775.6	3726.8	3620.8	3498.7	3266.5	2993.7	2948.9	2423.4
12.5°	4089.2	4097.4	4077.1	4052.6	4036.4	3938.6	3804.1	3527.2	3234.0	3185.1	2602.6
15°	4264.4	4272.6	4276.7	4309.2	4329.5	4260.3	4125.9	3824.5	3494.6	3449.8	2814.4
17.5°	4215.5	4235.8	4297.0	4415.1	4541.4	4545.5	4435.4	4117.8	3751.2	3702.4	3030.3
20°	4073.0	4089.2	4162.6	4341.8	4590.2	4732.8	4724.6	4415.1	3991.6	3938.6	3229.9
22.5°	4191.1	4211.5	4211.5	4321.5	4565.8	4830.6	4936.5	4708.3	4231.8	4182.9	3429.4
25°	4696.2	4708.3	4622.8	4578.0	4667.6	4912.0	5111.6	5026.1	4525.0	4468.0	3645.3
27.5°	5400.8	5380.4	5274.5	5095.3	4997.5	5062.7	5266.4	5327.4	4863.1	4793.9	3869.3
30°	6101.3	6089.1	5966.9	5726.6	5506.6	5368.1	5437.4	5596.3	5229.7	5148.2	4085.2
32.5°	6757.1	6736.6	6602.3	6321.2	6072.7	5816.2	5681.8	5840.6	5620.7	5527.0	4325.4
35°	7359.8	7306.9	7172.5	6879.2	6622.7	6378.3	6048.4	6072.7	6044.3	5946.5	4590.2
37.5°	7848.6	7807.9	7661.3	7388.4	7115.4	6883.3	6537.1	6337.5	6500.4	6406.7	4895.7
40°	8280.4	8235.6	8084.8	7812.0	7559.4	7339.5	7066.6	6659.3	7013.7	6907.8	5237.8
42.5°	8606.2	8573.6	8451.4	8182.6	7938.2	7738.6	7604.2	7066.6	7547.2	7445.3	5612.5
45°	8781.3	8748.7	8683.5	8467.7	8243.7	8088.9	8101.2	7551.3	8105.2	8019.6	6056.5
47.5°	8565.5	8589.9	8646.9	8606.2	8467.7	8394.3	8545.1	8052.3	8728.3	8646.9	6537.1
50°	7987.1	8011.5	8239.6	8520.7	8569.6	8659.2	8944.3	8630.6	9388.2	9323.1	7131.8
52.5°	6565.6	6700.0	7331.4	8003.4	8463.6	8834.3	9388.2	9490.0	10500.1	10500.1	8182.6
55°	4960.9	5079.0	5799.9	6972.9	8052.3	8850.6	9714.0	10072.5	11302.5	11318.7	8732.4
57.5°	4020.0	4093.3	4447.7	5649.2	7188.8	8646.9	10100.9	10573.4	11970.5	12043.8	9441.1
60°	3262.5	3303.2	3535.3	4370.3	5995.4	8097.1	10377.9	11290.3	12923.6	13025.3	10345.3
62.5°	2622.9	2663.8	2818.5	3319.5	4704.2	7066.6	10329.0	12035.6	14194.3	14361.3	11530.6
65°	2093.5	2138.3	2240.2	2549.7	3486.4	5787.7	9828.1	12418.5	15509.9	15672.7	12316.6
67.5°	1633.2	1674.0	1743.2	1946.9	2456.0	4329.5	8642.8	12015.3	16100.4	16238.9	12357.3
70°	1234.1	1254.4	1311.5	1441.8	1755.5	2875.5	6765.2	10663.0	15570.9	15697.2	11542.8
72.5°	957.2	953.1	985.6	1050.8	1226.0	1979.5	4484.3	8671.3	13766.7	13897.0	9848.5
75°	782.0	778.0	798.3	818.7	887.9	1327.8	2647.4	6529.0	11111.1	10862.6	7388.4
77.5°	659.8	655.7	676.1	680.2	708.7	916.5	1507.0	4297.0	7412.8	6985.1	4162.6
80°	558.0	553.9	578.4	586.5	606.9	672.1	867.6	2325.7	3722.7	3527.2	1987.6
82.5°	419.5	435.8	480.6	500.9	525.4	496.9	537.7	1026.4	1726.9	1649.5	863.5
85°	203.7	240.3	362.5	403.2	431.7	313.6	366.5	484.7	778.0	741.2	350.3
87.5°	69.3	61.1	215.8	256.6	281.0	142.6	203.7	268.8	321.7	293.3	110.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P236847

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6	1930.6
2.5°	1951.0	1889.9	1800.3	1731.0	1686.2	1649.5	1633.2	1629.2	1621.1	1617.0	1617.0
5°	1991.7	1881.7	1743.2	1670.0	1649.5	1633.2	1641.4	1645.5	1645.5	1645.5	1645.5
7.5°	2052.8	1898.0	1731.0	1682.1	1678.0	1678.0	1702.5	1714.7	1722.9	1722.9	1722.9
10°	2134.3	1926.5	1751.4	1710.7	1722.9	1731.0	1759.5	1775.8	1783.9	1788.0	1792.1
12.5°	2244.3	1987.6	1792.1	1759.5	1775.8	1779.9	1800.3	1808.4	1816.6	1820.6	1820.6
15°	2390.8	2077.2	1857.3	1816.6	1820.6	1816.6	1816.6	1808.4	1804.3	1804.3	1812.5
17.5°	2541.5	2162.7	1914.2	1857.3	1841.0	1808.4	1783.9	1763.6	1751.4	1743.2	1747.3
20°	2692.2	2240.2	1946.9	1865.5	1820.6	1767.7	1722.9	1694.3	1678.0	1661.8	1670.0
22.5°	2842.9	2313.4	1959.1	1841.0	1775.8	1698.4	1649.5	1604.7	1568.1	1543.6	1547.7
25°	3009.9	2394.9	1959.1	1812.5	1714.7	1633.2	1572.2	1498.8	1445.9	1425.6	1433.7
27.5°	3176.9	2464.2	1938.7	1759.5	1645.5	1564.0	1474.4	1388.9	1356.3	1344.1	1348.1
30°	3343.9	2517.1	1893.9	1694.3	1572.2	1482.6	1364.4	1307.4	1266.7	1234.1	1238.2
32.5°	3510.9	2553.8	1832.8	1612.9	1494.7	1380.8	1283.0	1217.8	1144.5	1103.8	1107.9
35°	3702.4	2582.2	1759.5	1531.5	1409.2	1291.2	1217.8	1111.9	1034.5	1002.0	993.8
37.5°	3901.9	2602.6	1682.1	1441.8	1323.7	1226.0	1152.7	1022.3	949.0	904.2	900.1
40°	4117.8	2610.8	1588.4	1348.1	1242.3	1185.2	1067.1	969.3	843.1	814.6	814.6
42.5°	4374.3	2606.7	1494.7	1254.4	1152.7	1091.6	1006.1	961.3	851.3	822.8	806.5
45°	4667.6	2606.7	1393.0	1144.5	1063.1	973.4	936.8	908.3	834.9	847.2	855.3
47.5°	5001.6	2598.6	1270.8	1054.9	989.7	912.4	892.0	830.8	802.4	810.5	818.7
50°	5461.8	2610.8	1160.8	981.6	936.8	871.7	847.2	814.6	802.4	806.5	802.4
52.5°	6101.3	2570.1	1054.9	936.8	896.0	810.5	810.5	806.5	810.5	806.5	806.5
55°	6451.5	2480.5	977.5	912.4	867.6	782.0	798.3	806.5	814.6	810.5	810.5
57.5°	6948.5	2419.4	916.5	896.0	851.3	773.9	790.1	806.5	810.5	806.5	806.5
60°	7535.0	2378.6	875.6	900.1	839.0	773.9	794.2	806.5	802.4	798.3	798.3
62.5°	8215.2	2362.3	847.2	912.4	826.9	778.0	794.2	806.5	790.1	786.0	786.0
65°	8471.8	2215.7	810.5	920.5	834.9	778.0	790.1	794.2	773.9	769.8	765.7
67.5°	8076.7	1963.1	757.6	904.2	859.4	778.0	778.0	773.9	749.4	745.3	737.2
70°	7192.9	1629.2	676.1	851.3	875.6	782.0	761.7	741.2	716.9	716.9	700.5
72.5°	5889.5	1283.0	570.2	757.6	863.5	794.2	729.1	700.5	672.1	672.1	655.7
75°	4244.0	957.2	456.1	631.3	810.5	790.1	688.3	651.7	619.1	615.0	594.6
77.5°	2419.4	672.1	370.6	492.9	720.9	769.8	651.7	594.6	558.0	545.7	533.6
80°	1242.3	452.1	301.4	387.0	598.7	712.8	623.2	529.5	488.8	468.4	448.1
82.5°	590.5	301.4	232.2	285.1	452.1	623.2	586.5	456.1	411.3	387.0	362.5
85°	264.7	179.2	154.8	183.3	321.7	484.7	517.3	374.7	321.7	403.2	297.4
87.5°	85.5	81.4	81.4	85.5	154.8	211.8	378.8	276.9	256.6	211.8	179.2
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)