

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: P236848

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236848
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-AF72-150-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20641.1 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 153
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

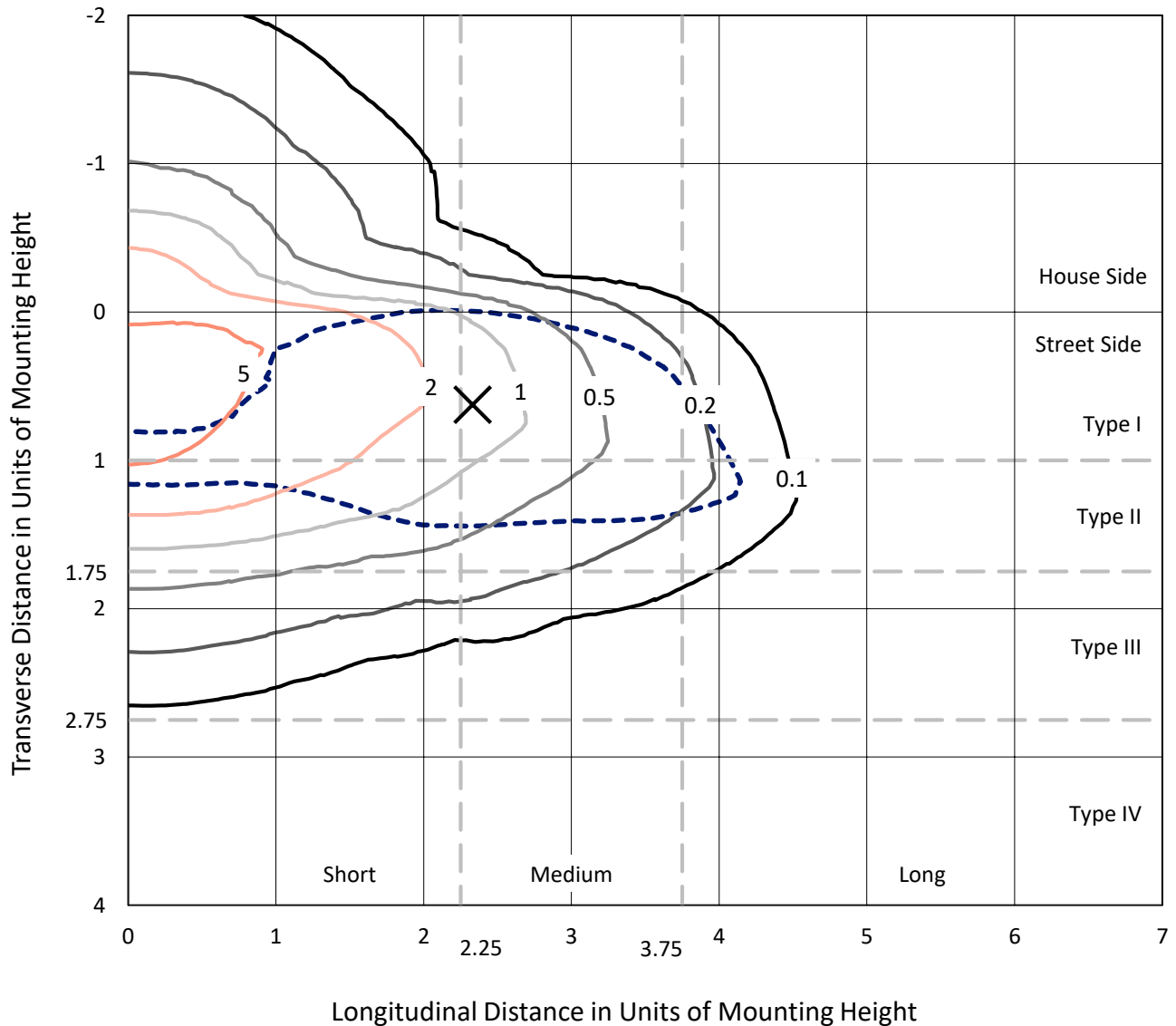


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

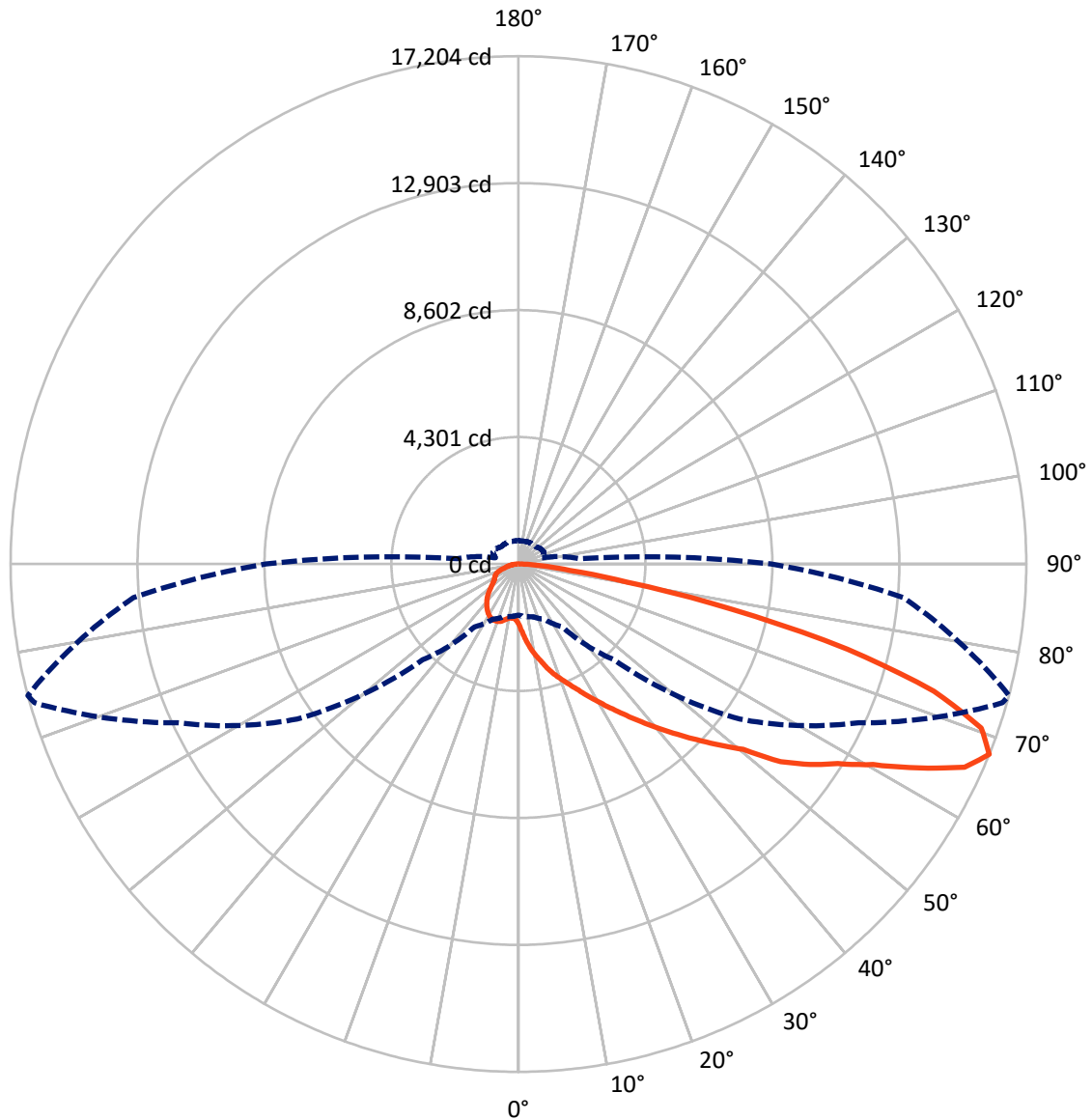


Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Medium - Semi-Cutoff

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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	3524.7	0.0	3524.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	17116.4	0.0	17116.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	20641.1	0.0	20641.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.3	1.2
10°-20°	868.4	4.2
20°-30°	1583.8	7.7
30°-40°	2599.7	12.6
40°-50°	3759.5	18.2
50°-60°	4430.6	21.5
60°-70°	4305.5	20.9
70°-80°	2393.2	11.6
80°-90°	460.2	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°	20641.1	100.0
0°-180°	20641.1	100.0



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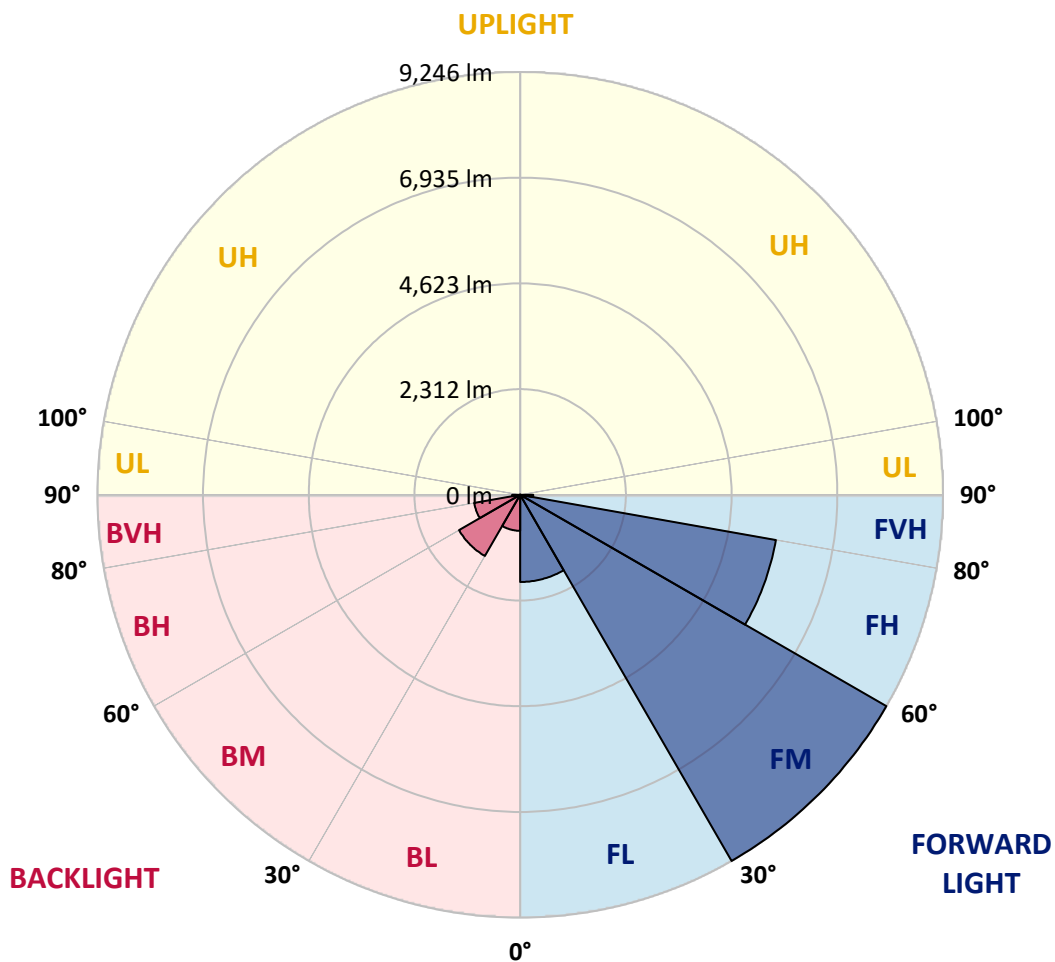
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1905.7	9.2			
FM (30°-60°)	9246.1	44.8			
FH (60°-80°)	5678.1	27.5			G3/7500
FVH (80°-90°)	286.4	1.4			G3/500
BL (0°-30°)	786.7	3.8	B2/1000		
BM (30°-60°)	1543.7	7.5	B2/2500		
BH (60°-80°)	1020.6	4.9	B3/2500		G3/2500
BVH (80°-90°)	173.8	0.8			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3
2.5°	2899.8	2908.4	2891.1	2852.3	2796.1	2692.6	2602.0	2442.3	2299.9	2282.6	2131.6
5°	3408.9	3417.5	3395.9	3348.4	3288.1	3175.9	3050.7	2843.6	2614.9	2571.8	2252.4
7.5°	3758.4	3762.7	3736.8	3689.4	3641.9	3529.7	3404.6	3171.6	2891.1	2856.6	2407.8
10°	4056.1	4064.8	4030.2	4000.0	3948.3	3836.1	3706.7	3460.6	3171.6	3124.1	2567.4
12.5°	4332.3	4340.9	4319.4	4293.4	4276.2	4172.6	4030.2	3736.8	3426.2	3374.4	2757.4
15°	4517.9	4526.5	4530.8	4565.3	4586.9	4513.6	4371.2	4051.8	3702.3	3654.8	2981.7
17.5°	4466.1	4487.7	4552.3	4677.5	4811.2	4815.5	4699.1	4362.5	3974.2	3922.4	3210.4
20°	4315.0	4332.3	4409.9	4599.8	4863.0	5014.1	5005.4	4677.5	4228.8	4172.6	3421.9
22.5°	4440.2	4461.8	4461.8	4578.2	4837.1	5117.6	5229.8	4988.2	4483.3	4431.5	3633.3
25°	4975.2	4988.2	4897.6	4850.1	4945.0	5204.0	5415.4	5324.8	4794.1	4733.6	3861.9
27.5°	5721.8	5700.2	5588.0	5398.1	5294.6	5363.6	5579.4	5644.0	5152.2	5078.8	4099.3
30°	6463.9	6451.0	6321.5	6066.9	5833.9	5687.2	5760.5	5928.9	5540.5	5454.2	4328.0
32.5°	7158.6	7137.1	6994.7	6697.0	6433.7	6161.8	6019.5	6187.7	5954.8	5855.5	4582.6
35°	7797.2	7741.2	7598.8	7288.1	7016.2	6757.4	6407.9	6433.7	6403.6	6299.9	4863.0
37.5°	8315.1	8272.0	8116.6	7827.5	7538.4	7292.4	6925.7	6714.2	6886.8	6787.6	5186.7
40°	8772.5	8725.1	8565.4	8276.3	8008.7	7775.8	7486.6	7055.1	7430.5	7318.3	5549.1
42.5°	9117.7	9083.2	8953.7	8668.9	8410.0	8198.5	8056.1	7486.6	7995.8	7887.9	5946.1
45°	9303.2	9268.8	9199.7	8971.0	8733.6	8569.7	8582.7	8000.1	8587.0	8496.3	6416.5
47.5°	9074.5	9100.5	9160.8	9117.7	8971.0	8893.3	9053.0	8530.8	9247.2	9160.8	6925.7
50°	8461.8	8487.7	8729.4	9027.0	9078.9	9173.8	9475.8	9143.5	9946.2	9877.1	7555.6
52.5°	6955.9	7098.3	7767.1	8479.0	8966.7	9359.3	9946.2	10054.1	11124.2	11124.2	8668.9
55°	5255.7	5380.8	6144.7	7387.3	8530.8	9376.6	10291.4	10671.1	11974.3	11991.5	9251.5
57.5°	4259.0	4336.6	4712.0	5985.0	7616.1	9160.8	10701.3	11201.8	12681.9	12759.6	10002.3
60°	3456.3	3499.5	3745.4	4630.1	6351.7	8578.3	10994.8	11961.3	13691.7	13799.5	10960.2
62.5°	2778.8	2822.0	2986.0	3516.8	4983.9	7486.6	10942.9	12751.0	15037.9	15214.9	12215.9
65°	2218.0	2265.4	2373.2	2701.2	3693.7	6131.7	10412.2	13156.6	16431.7	16604.3	13048.7
67.5°	1730.3	1773.5	1846.8	2062.6	2602.0	4586.9	9156.5	12729.4	17057.4	17204.1	13091.8
70°	1307.4	1329.0	1389.5	1527.6	1859.8	3046.4	7167.3	11296.8	16496.4	16630.2	12228.9
72.5°	1014.1	1009.8	1044.2	1113.3	1298.8	2097.2	4750.9	9186.7	14584.8	14722.9	10433.8
75°	828.5	824.2	845.8	867.4	940.7	1406.7	2804.8	6917.0	11771.4	11508.2	7827.5
77.5°	699.1	694.7	716.3	720.6	750.8	970.9	1596.5	4552.3	7853.4	7400.3	4409.9
80°	591.2	586.9	612.7	621.3	642.9	712.0	919.1	2463.9	3944.0	3736.8	2105.7
82.5°	444.5	461.8	509.2	530.7	556.7	526.4	569.6	1087.4	1829.5	1747.6	914.8
85°	215.7	254.6	384.0	427.2	457.4	332.3	388.3	513.5	824.2	785.3	371.1
87.5°	73.3	64.8	228.7	271.8	297.8	151.0	215.7	284.8	340.8	310.7	116.5
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°	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3	2045.3
2.5°	2066.9	2002.2	1907.3	1833.8	1786.4	1747.6	1730.3	1726.0	1717.4	1713.0	1713.0
5°	2110.0	1993.5	1846.8	1769.2	1747.6	1730.3	1738.9	1743.3	1743.3	1743.3	1743.3
7.5°	2174.8	2010.8	1833.8	1782.1	1777.8	1777.8	1803.7	1816.7	1825.3	1825.3	1825.3
10°	2261.1	2041.0	1855.4	1812.4	1825.3	1833.8	1864.1	1881.3	1890.0	1894.3	1898.6
12.5°	2377.5	2105.7	1898.6	1864.1	1881.3	1885.7	1907.3	1915.9	1924.5	1928.8	1928.8
15°	2532.9	2200.7	1967.6	1924.5	1928.8	1924.5	1924.5	1915.9	1911.6	1911.6	1920.2
17.5°	2692.6	2291.3	2028.1	1967.6	1950.4	1915.9	1890.0	1868.4	1855.4	1846.8	1851.1
20°	2852.3	2373.2	2062.6	1976.3	1928.8	1872.7	1825.3	1795.1	1777.8	1760.5	1769.2
22.5°	3011.9	2451.0	2075.6	1950.4	1881.3	1799.4	1747.6	1700.1	1661.3	1635.4	1639.7
25°	3188.8	2537.2	2075.6	1920.2	1816.7	1730.3	1665.6	1587.9	1531.9	1510.3	1518.9
27.5°	3365.7	2610.6	2054.0	1864.1	1743.3	1657.0	1562.0	1471.4	1436.9	1423.9	1428.2
30°	3542.7	2666.7	2006.5	1795.1	1665.6	1570.6	1445.5	1385.2	1342.0	1307.4	1311.7
32.5°	3719.6	2705.5	1941.8	1708.7	1583.6	1462.8	1359.2	1290.2	1212.5	1169.3	1173.7
35°	3922.4	2735.8	1864.1	1622.5	1493.0	1367.9	1290.2	1178.0	1096.0	1061.5	1052.8
37.5°	4133.8	2757.4	1782.1	1527.6	1402.4	1298.8	1221.2	1083.1	1005.4	957.9	953.6
40°	4362.5	2766.0	1682.9	1428.2	1316.1	1255.7	1130.6	1026.9	893.2	863.0	863.0
42.5°	4634.4	2761.7	1583.6	1329.0	1221.2	1156.4	1065.8	1018.3	901.8	871.7	854.4
45°	4945.0	2761.7	1475.7	1212.5	1126.3	1031.3	992.5	962.3	884.5	897.5	906.1
47.5°	5298.9	2753.0	1346.3	1117.6	1048.5	966.6	945.0	880.2	850.1	858.7	867.4
50°	5786.4	2766.0	1229.8	1039.9	992.5	923.4	897.5	863.0	850.1	854.4	850.1
52.5°	6463.9	2722.8	1117.6	992.5	949.3	858.7	858.7	854.4	858.7	854.4	854.4
55°	6835.1	2627.9	1035.6	966.6	919.1	828.5	845.8	854.4	863.0	858.7	858.7
57.5°	7361.5	2563.1	970.9	949.3	901.8	819.9	837.1	854.4	858.7	854.4	854.4
60°	7982.8	2519.9	927.7	953.6	888.9	819.9	841.5	854.4	850.1	845.8	845.8
62.5°	8703.5	2502.8	897.5	966.6	876.0	824.2	841.5	854.4	837.1	832.8	832.8
65°	8975.3	2347.4	858.7	975.2	884.5	824.2	837.1	841.5	819.9	815.5	811.2
67.5°	8556.8	2079.9	802.6	957.9	910.4	824.2	824.2	819.9	794.0	789.6	781.0
70°	7620.4	1726.0	716.3	901.8	927.7	828.5	806.9	785.3	759.4	759.4	742.2
72.5°	6239.6	1359.2	604.2	802.6	914.8	841.5	772.4	742.2	712.0	712.0	694.7
75°	4496.3	1014.1	483.2	668.8	858.7	837.1	729.3	690.4	655.9	651.6	630.0
77.5°	2563.1	712.0	392.7	522.1	763.7	815.5	690.4	630.0	591.2	578.2	565.3
80°	1316.1	478.9	319.3	409.9	634.3	755.1	660.2	561.0	517.8	496.2	474.6
82.5°	625.6	319.3	245.9	302.1	478.9	660.2	621.3	483.2	435.8	409.9	384.0
85°	280.5	189.9	164.0	194.2	340.8	513.5	548.0	397.0	340.8	427.2	315.0
87.5°	90.6	86.3	86.3	90.6	164.0	224.3	401.3	293.4	271.8	224.3	189.9
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)