

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: P265689

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265689
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-AF72-220-D-U-T2R-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22788 lumens
Efficiency: N/A
Efficacy: 102.6 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): 222
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

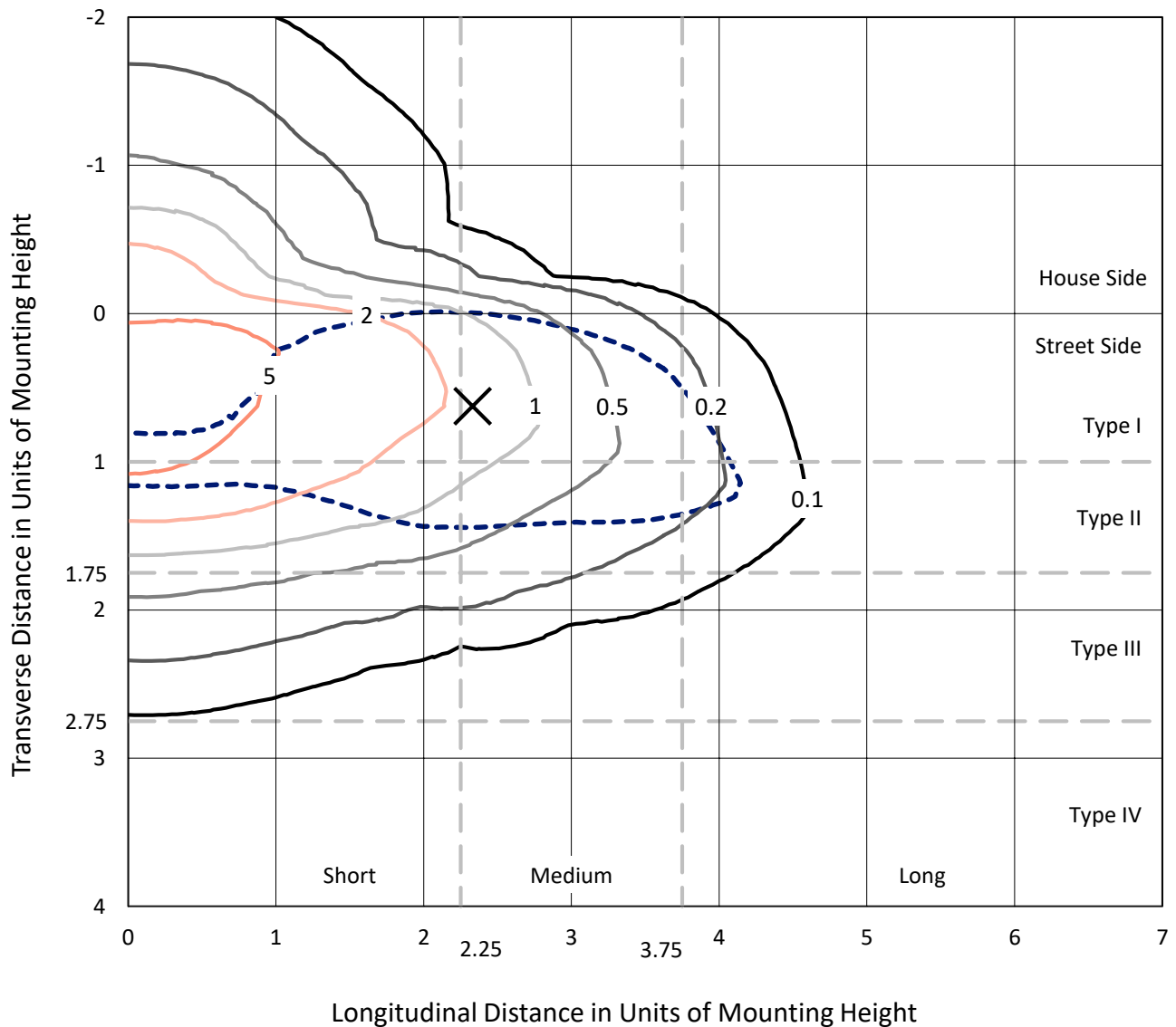


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Iso-Footcandle Lines of Horizontal Illumination

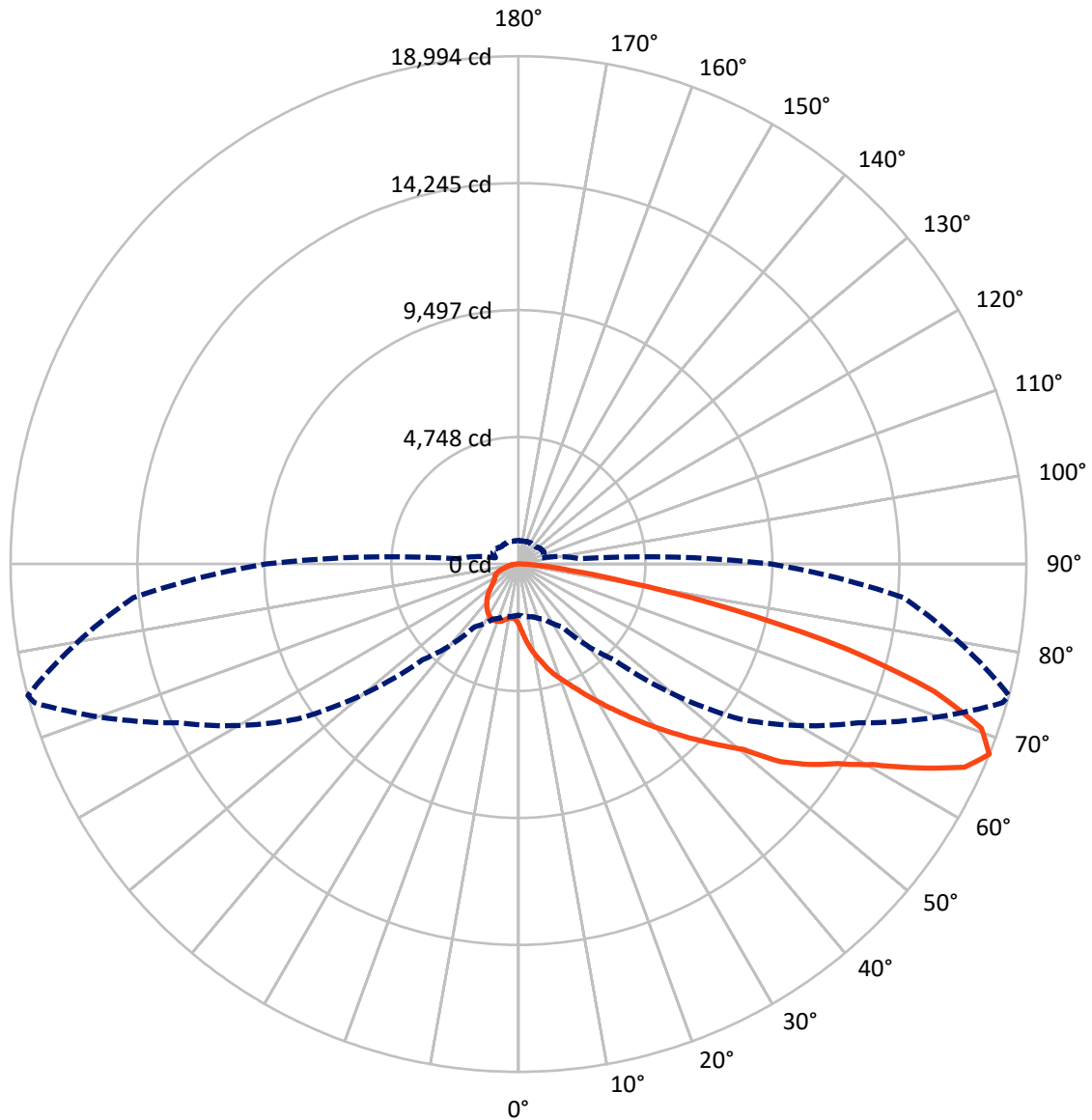
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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	3891.3	0.0	3891.3
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	18896.7	0.0	18896.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	22788.0	0.0	22788.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.3	1.2
10°-20°	958.7	4.2
20°-30°	1748.5	7.7
30°-40°	2870.1	12.6
40°-50°	4150.5	18.2
50°-60°	4891.4	21.5
60°-70°	4753.3	20.9
70°-80°	2642.2	11.6
80°-90°	508.0	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°	22788.0	100.0
0°-180°	22788.0	100.0



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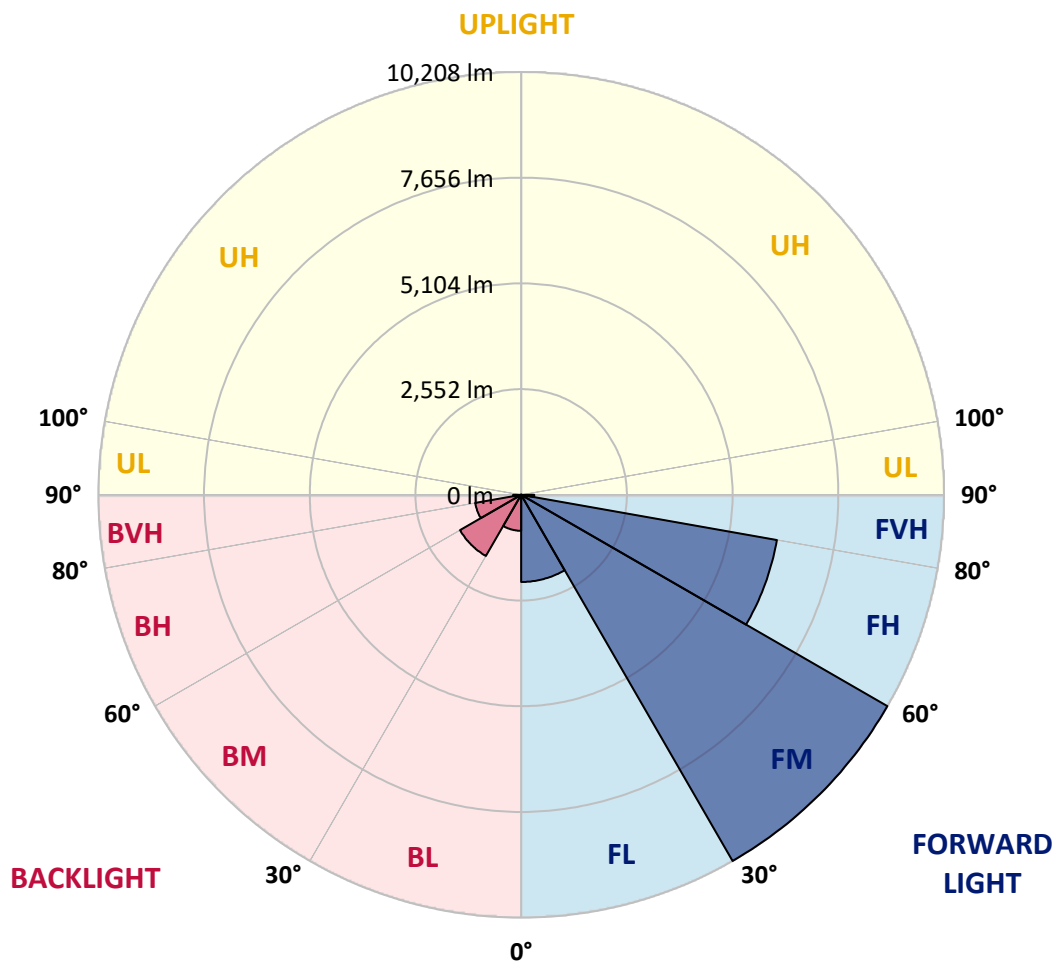
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2103.9	9.2			
FM	(30°-60°)	10207.8	44.8			
FH	(60°-80°)	6268.7	27.5			G3/7500
FVH	(80°-90°)	316.2	1.4			G3/500
BL	(0°-30°)	868.6	3.8	B2/1000		
BM	(30°-60°)	1704.2	7.5	B2/2500		
BH	(60°-80°)	1126.7	4.9	B3/2500		G3/2500
BVH	(80°-90°)	191.9	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1
2.5°	3201.3	3210.8	3191.8	3148.9	3086.9	2972.6	2872.6	2696.4	2539.1	2520.0	2353.4
5°	3763.4	3773.1	3749.2	3696.7	3630.1	3506.3	3368.0	3139.3	2887.0	2839.3	2486.8
7.5°	4149.4	4154.1	4125.5	4073.2	4020.8	3896.8	3758.7	3501.5	3191.8	3153.7	2658.3
10°	4478.1	4487.6	4449.5	4416.1	4358.9	4235.1	4092.1	3820.6	3501.5	3449.0	2834.5
12.5°	4782.9	4792.5	4768.7	4740.0	4721.0	4606.7	4449.5	4125.5	3782.6	3725.4	3044.0
15°	4987.7	4997.4	5002.0	5040.2	5063.9	4983.0	4825.8	4473.3	4087.4	4034.9	3291.7
17.5°	4930.5	4954.4	5025.8	5164.0	5311.7	5316.4	5187.8	4816.3	4387.5	4330.4	3544.4
20°	4763.8	4782.9	4868.6	5078.3	5368.9	5535.6	5526.1	5164.0	4668.6	4606.7	3777.7
22.5°	4902.1	4925.9	4925.9	5054.5	5340.3	5649.9	5773.8	5507.0	4949.7	4892.4	4011.2
25°	5492.7	5507.0	5407.0	5354.5	5459.4	5745.2	5978.7	5878.6	5292.6	5226.0	4263.6
27.5°	6316.9	6293.0	6169.2	5959.5	5845.2	5921.4	6159.7	6231.2	5688.1	5607.1	4525.8
30°	7136.2	7122.0	6979.0	6698.0	6440.8	6278.8	6359.8	6545.5	6116.7	6021.5	4778.2
32.5°	7903.3	7879.5	7722.2	7393.5	7102.9	6802.9	6645.7	6831.4	6574.2	6464.6	5059.3
35°	8608.3	8546.4	8389.1	8046.2	7746.1	7460.2	7074.3	7102.9	7069.7	6955.2	5368.9
37.5°	9180.0	9132.3	8960.9	8641.6	8322.4	8050.9	7646.1	7412.5	7603.2	7493.5	5726.2
40°	9684.9	9632.5	9456.3	9137.1	8841.7	8584.6	8265.3	7788.9	8203.4	8079.5	6126.4
42.5°	10066.0	10027.9	9884.9	9570.6	9284.8	9051.3	8894.1	8265.3	8827.5	8708.3	6564.6
45°	10271.0	10232.8	10156.5	9904.1	9642.0	9460.9	9475.3	8832.1	9480.2	9380.0	7083.9
47.5°	10018.3	10047.1	10113.7	10066.0	9904.1	9818.4	9994.6	9418.2	10209.0	10113.7	7646.1
50°	9342.0	9370.5	9637.2	9965.9	10023.2	10128.0	10461.4	10094.7	10980.7	10904.4	8341.5
52.5°	7679.3	7836.5	8575.0	9361.0	9899.3	10332.8	10980.7	11099.7	12281.3	12281.3	9570.6
55°	5802.4	5940.5	6783.7	8155.7	9418.2	10351.9	11361.9	11781.0	13219.6	13238.9	10213.6
57.5°	4701.9	4787.6	5202.2	6607.5	8408.2	10113.7	11814.4	12367.0	14001.1	14086.7	11042.7
60°	3815.9	3863.5	4135.1	5111.6	7012.3	9470.6	12138.3	13205.4	15115.7	15234.8	12100.2
62.5°	3067.9	3115.6	3296.6	3882.6	5502.3	8265.3	12081.1	14077.2	16602.0	16797.3	13486.6
65°	2448.6	2501.1	2620.1	2982.2	4077.9	6769.4	11495.3	14525.1	18140.8	18331.4	14405.8
67.5°	1910.3	1957.9	2039.0	2277.2	2872.6	5063.9	10108.9	14053.4	18831.6	18993.6	14453.5
70°	1443.4	1467.3	1533.9	1686.4	2053.3	3363.3	7912.8	12471.8	18212.2	18359.9	13500.7
72.5°	1119.5	1114.7	1152.9	1229.2	1434.0	2315.2	5245.1	10142.3	16101.8	16254.3	11519.1
75°	914.7	910.0	933.7	957.6	1038.5	1553.0	3096.5	7636.5	12995.8	12705.2	8641.6
77.5°	771.7	767.1	790.8	795.5	829.0	1071.9	1762.7	5025.8	8670.3	8170.1	4868.6
80°	652.7	647.9	676.5	685.9	709.8	786.0	1014.6	2720.2	4354.2	4125.5	2324.8
82.5°	490.7	509.8	562.1	586.0	614.5	581.3	628.9	1200.5	2019.8	1929.4	1010.0
85°	238.2	281.1	424.0	471.6	504.9	366.8	428.8	566.9	910.0	867.0	409.6
87.5°	80.9	71.4	252.5	300.2	328.7	166.7	238.2	314.3	376.3	343.1	128.6
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°	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1	2258.1
2.5°	2281.9	2210.4	2105.6	2024.6	1972.3	1929.4	1910.3	1905.6	1896.1	1891.2	1891.2
5°	2329.6	2200.8	2039.0	1953.2	1929.4	1910.3	1919.9	1924.6	1924.6	1924.6	1924.6
7.5°	2401.0	2219.9	2024.6	1967.5	1962.6	1962.6	1991.4	2005.6	2015.1	2015.1	2015.1
10°	2496.3	2253.3	2048.4	2000.9	2015.1	2024.6	2057.9	2077.1	2086.6	2091.3	2096.0
12.5°	2624.8	2324.8	2096.0	2057.9	2077.1	2081.8	2105.6	2115.1	2124.8	2129.4	2129.4
15°	2796.3	2429.6	2172.3	2124.8	2129.4	2124.8	2124.8	2115.1	2110.4	2110.4	2119.9
17.5°	2972.6	2529.5	2239.0	2172.3	2153.2	2115.1	2086.6	2062.8	2048.4	2039.0	2043.7
20°	3148.9	2620.1	2277.2	2181.9	2129.4	2067.4	2015.1	1981.8	1962.6	1943.7	1953.2
22.5°	3325.2	2705.9	2291.4	2153.2	2077.1	1986.5	1929.4	1877.0	1834.1	1805.6	1810.3
25°	3520.5	2801.2	2291.4	2119.9	2005.6	1910.3	1838.8	1753.1	1691.1	1667.3	1676.9
27.5°	3715.7	2882.1	2267.6	2057.9	1924.6	1829.3	1724.6	1624.5	1586.3	1572.0	1576.9
30°	3911.1	2944.0	2215.2	1981.8	1838.8	1734.1	1595.8	1529.3	1481.6	1443.4	1448.2
32.5°	4106.4	2987.0	2143.7	1886.5	1748.3	1615.0	1500.6	1424.4	1338.7	1291.0	1295.7
35°	4330.4	3020.3	2057.9	1791.2	1648.3	1510.1	1424.4	1300.6	1210.0	1171.8	1162.3
37.5°	4563.7	3044.0	1967.5	1686.4	1548.3	1434.0	1348.1	1195.7	1109.9	1057.6	1052.9
40°	4816.3	3053.7	1858.0	1576.9	1453.0	1386.3	1248.1	1133.8	986.1	952.7	952.7
42.5°	5116.3	3048.8	1748.3	1467.3	1348.1	1276.8	1176.7	1124.3	995.6	962.4	943.2
45°	5459.4	3048.8	1629.3	1338.7	1243.3	1138.5	1095.8	1062.3	976.5	990.9	1000.4
47.5°	5850.0	3039.3	1486.3	1233.8	1157.6	1067.0	1043.3	971.8	938.5	948.0	957.6
50°	6388.3	3053.7	1357.7	1148.2	1095.8	1019.4	990.9	952.7	938.5	943.2	938.5
52.5°	7136.2	3006.0	1233.8	1095.8	1048.1	948.0	948.0	943.2	948.0	943.2	943.2
55°	7545.9	2901.2	1143.4	1067.0	1014.6	914.7	933.7	943.2	952.7	948.0	948.0
57.5°	8127.1	2829.8	1071.9	1048.1	995.6	905.1	924.1	943.2	948.0	943.2	943.2
60°	8813.1	2782.1	1024.2	1052.9	981.4	905.1	928.9	943.2	938.5	933.7	933.7
62.5°	9608.7	2763.0	990.9	1067.0	967.0	910.0	928.9	943.2	924.1	919.4	919.4
65°	9908.8	2591.5	948.0	1076.6	976.5	910.0	924.1	928.9	905.1	900.5	895.6
67.5°	9446.8	2296.2	886.1	1057.6	1005.2	910.0	910.0	905.1	876.6	871.7	862.3
70°	8412.9	1905.6	790.8	995.6	1024.2	914.7	890.8	867.0	838.5	838.5	819.3
72.5°	6888.6	1500.6	666.9	886.1	1010.0	928.9	852.8	819.3	786.0	786.0	767.1
75°	4963.9	1119.5	533.6	738.3	948.0	924.1	805.2	762.2	724.2	719.4	695.5
77.5°	2829.8	786.0	433.5	576.4	843.1	900.5	762.2	695.5	652.7	638.3	624.1
80°	1453.0	528.8	352.6	452.6	700.3	833.6	728.9	619.3	571.6	547.8	524.0
82.5°	690.7	352.6	271.6	333.5	528.8	728.9	685.9	533.6	481.1	452.6	424.0
85°	309.6	209.7	181.0	214.3	376.3	566.9	605.0	438.3	376.3	471.6	347.7
87.5°	100.0	95.3	95.3	100.0	181.0	247.8	443.0	324.0	300.2	247.8	209.7
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)