

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: P265617

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265617
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-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 16547.8 lumens
Efficiency: N/A
Efficacy: 115.7 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

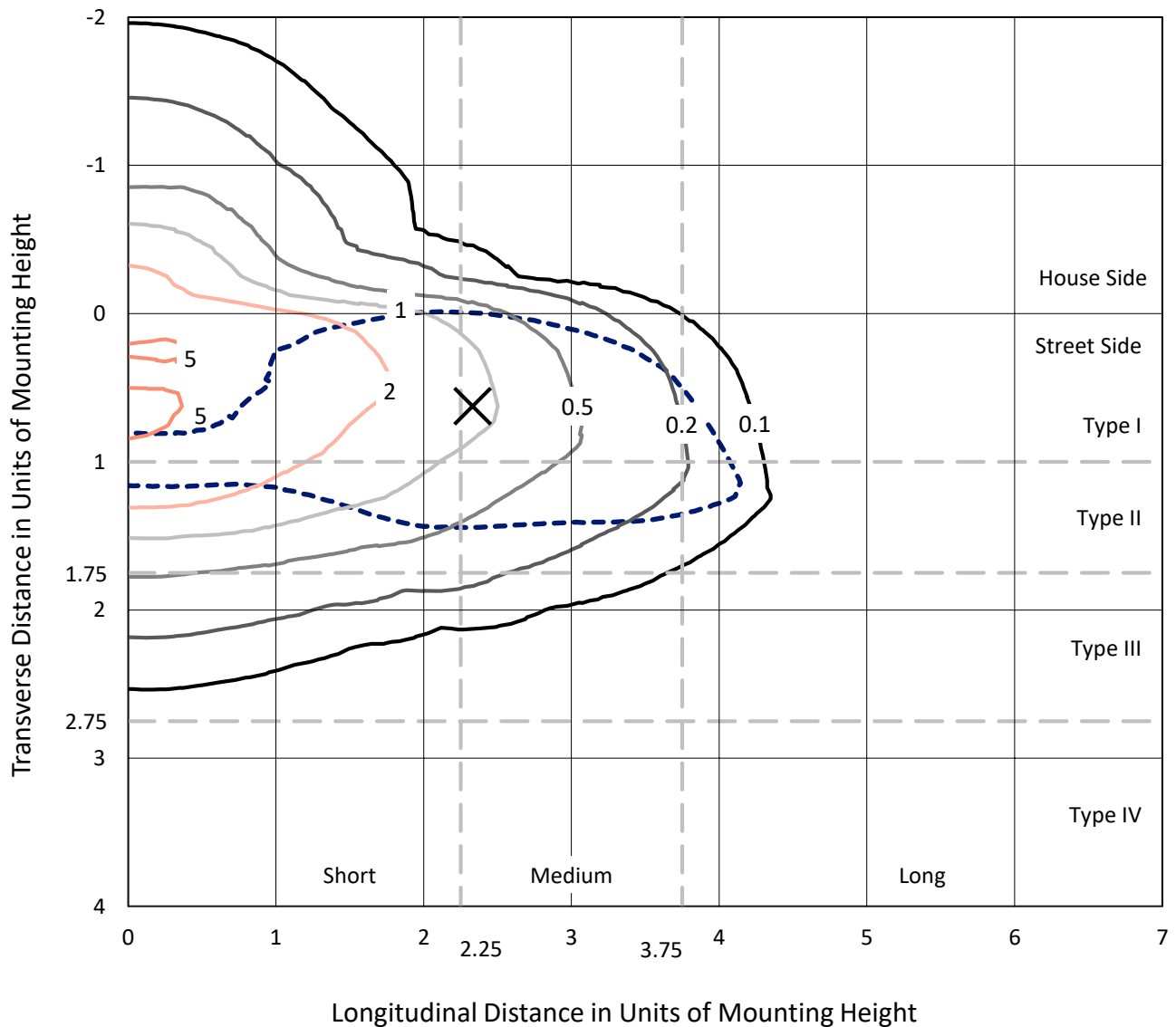
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

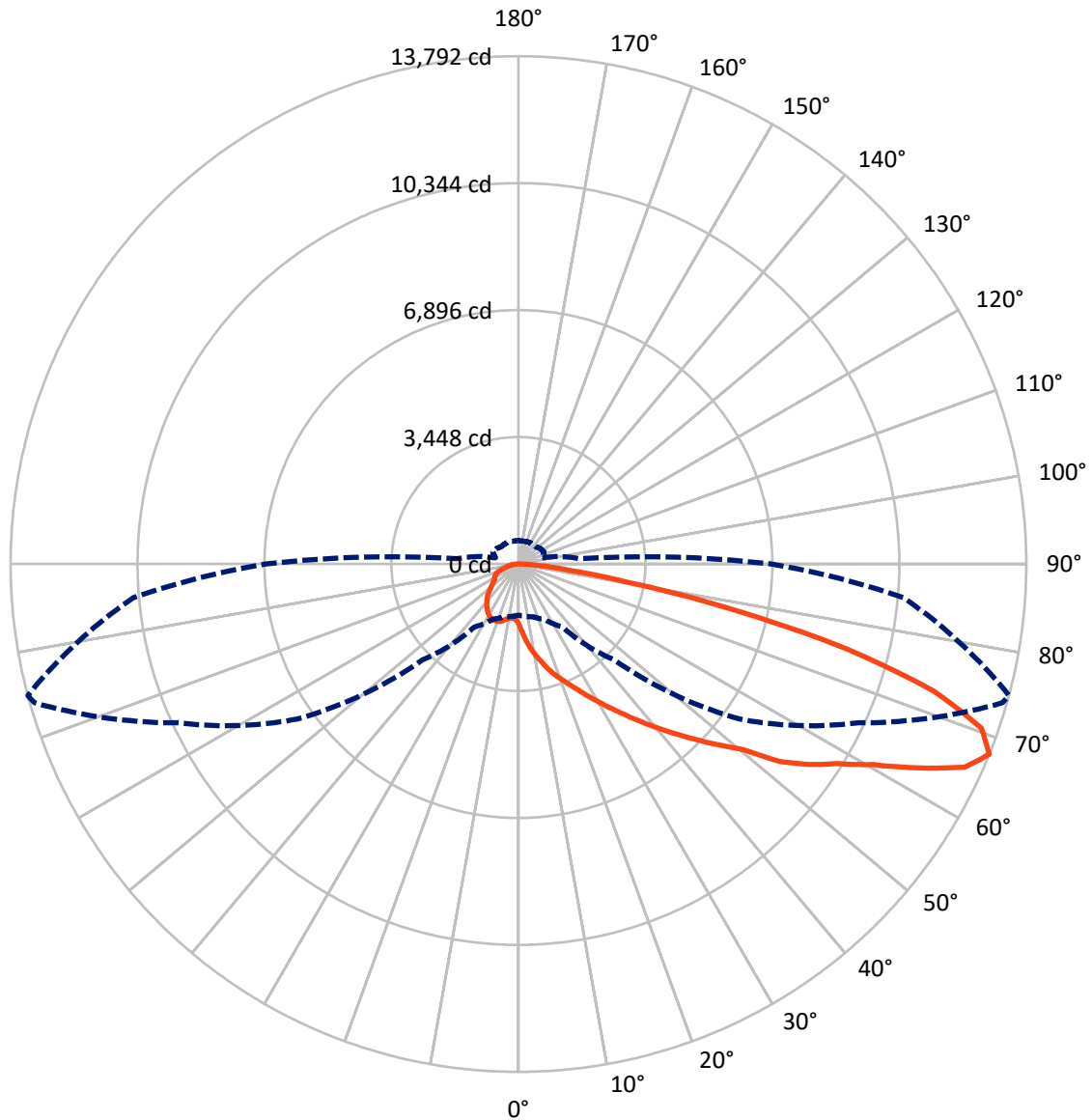
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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	2825.8	0.0	2825.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	13722.0	0.0	13722.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	16547.8	0.0	16547.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.6	1.2
10°-20°	696.2	4.2
20°-30°	1269.7	7.7
30°-40°	2084.1	12.6
40°-50°	3014.0	18.2
50°-60°	3552.0	21.5
60°-70°	3451.6	20.9
70°-80°	1918.6	11.6
80°-90°	368.9	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°	16547.8	100.0
0°-180°	16547.8	100.0

Coefficient of Utilization



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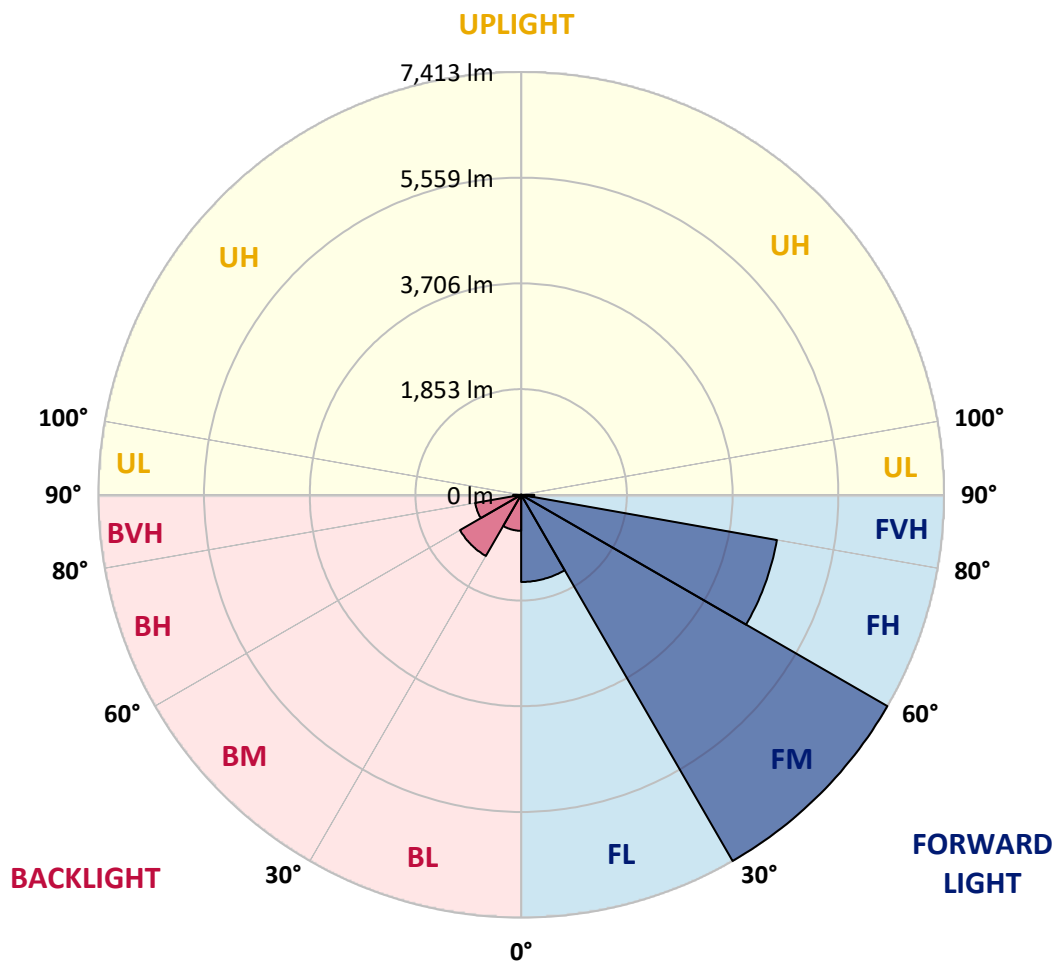
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1527.8	9.2			
FM	(30°-60°)	7412.5	44.8			
FH	(60°-80°)	4552.1	27.5			G2/5000
FVH	(80°-90°)	229.6	1.4			G3/500
BL	(0°-30°)	630.7	3.8	B2/1000		
BM	(30°-60°)	1237.6	7.5	B2/2500		
BH	(60°-80°)	818.2	4.9	B2/1000		G2/1000
BVH	(80°-90°)	139.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8
2.5°	2324.6	2331.6	2317.7	2286.6	2241.6	2158.6	2086.0	1957.9	1843.9	1829.9	1708.9
5°	2732.9	2739.8	2722.6	2684.4	2635.9	2546.1	2445.7	2279.7	2096.4	2061.8	1805.8
7.5°	3013.1	3016.6	2995.8	2957.7	2919.8	2829.8	2729.4	2542.7	2317.7	2290.0	1930.3
10°	3251.8	3258.7	3231.1	3206.8	3165.3	3075.3	2971.6	2774.3	2542.7	2504.6	2058.2
12.5°	3473.1	3480.0	3462.7	3442.0	3428.2	3345.2	3231.1	2995.8	2746.7	2705.2	2210.5
15°	3622.0	3628.9	3632.2	3660.0	3677.3	3618.5	3504.3	3248.4	2968.1	2930.0	2390.4
17.5°	3580.5	3597.7	3649.6	3750.0	3857.1	3860.6	3767.2	3497.5	3186.1	3144.5	2573.7
20°	3459.4	3473.1	3535.4	3687.6	3898.6	4019.7	4012.8	3750.0	3390.2	3345.2	2743.2
22.5°	3559.7	3577.0	3577.0	3670.4	3878.0	4102.7	4192.7	3999.0	3594.3	3552.7	2912.8
25°	3988.7	3999.0	3926.3	3888.4	3964.4	4172.0	4341.5	4268.8	3843.3	3794.9	3096.1
27.5°	4587.0	4569.8	4479.8	4327.7	4244.6	4299.9	4472.9	4524.9	4130.4	4071.7	3286.4
30°	5182.1	5171.7	5067.9	4863.9	4677.0	4559.3	4618.1	4753.1	4441.8	4372.6	3469.8
32.5°	5739.0	5721.8	5607.6	5368.9	5157.9	4939.9	4825.8	4960.7	4773.9	4694.4	3673.8
35°	6251.0	6206.0	6091.9	5842.8	5624.8	5417.3	5137.0	5157.9	5133.6	5050.6	3898.6
37.5°	6666.1	6631.6	6507.1	6275.2	6043.4	5846.3	5552.2	5382.7	5521.2	5441.6	4158.2
40°	7032.8	6994.7	6866.7	6635.1	6420.5	6233.7	6001.9	5656.0	5957.0	5867.0	4448.6
42.5°	7309.6	7281.9	7178.0	6949.7	6742.1	6572.7	6458.5	6001.9	6410.1	6323.7	4766.9
45°	7458.3	7430.6	7375.3	7191.9	7001.7	6870.2	6880.6	6413.5	6884.2	6811.4	5144.1
47.5°	7275.0	7295.8	7344.2	7309.6	7191.9	7129.7	7257.6	6839.1	7413.4	7344.2	5552.2
50°	6783.7	6804.5	6998.2	7236.9	7278.4	7354.6	7596.6	7330.3	7973.7	7918.4	6057.4
52.5°	5576.5	5690.7	6226.8	6797.6	7188.4	7503.4	7973.7	8060.2	8918.2	8918.2	6949.7
55°	4213.5	4313.8	4926.0	5922.3	6839.1	7517.1	8250.6	8554.9	9599.6	9613.5	7416.8
57.5°	3414.4	3476.6	3777.6	4798.0	6105.7	7344.2	8579.2	8980.4	10166.9	10229.2	8018.7
60°	2770.9	2805.5	3002.8	3711.8	5092.1	6877.2	8814.3	9589.2	10976.5	11062.9	8786.7
62.5°	2227.7	2262.4	2393.9	2819.3	3995.5	6001.9	8772.8	10222.4	12055.8	12197.5	9793.3
65°	1778.0	1816.2	1902.6	2165.5	2961.3	4915.7	8347.4	10547.4	13173.1	13311.5	10461.0
67.5°	1387.3	1421.7	1480.5	1653.6	2086.0	3677.3	7340.7	10205.0	13674.7	13792.3	10495.5
70°	1048.2	1065.5	1113.9	1224.6	1490.9	2442.3	5746.0	9056.5	13224.9	13332.3	9803.7
72.5°	813.0	809.6	837.2	892.5	1041.2	1681.3	3808.8	7364.9	11692.6	11803.2	8364.7
75°	664.1	660.8	678.0	695.3	754.1	1127.7	2248.5	5545.2	9437.1	9226.0	6275.2
77.5°	560.5	556.9	574.2	577.7	602.0	778.3	1279.9	3649.6	6296.0	5932.8	3535.4
80°	473.9	470.4	491.3	498.1	515.4	570.9	736.8	1975.3	3161.9	2995.8	1688.2
82.5°	356.3	370.1	408.2	425.4	446.3	422.1	456.6	871.7	1466.8	1401.0	733.3
85°	173.0	204.2	307.8	342.4	366.7	266.3	311.4	411.7	660.8	629.6	297.5
87.5°	58.7	51.9	183.3	217.8	238.7	121.1	173.0	228.3	273.3	249.1	93.5
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°	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8	1639.8
2.5°	1657.1	1605.1	1529.1	1470.3	1432.2	1401.0	1387.3	1383.7	1376.8	1373.4	1373.4
5°	1691.6	1598.3	1480.5	1418.3	1401.0	1387.3	1394.1	1397.6	1397.6	1397.6	1397.6
7.5°	1743.5	1612.1	1470.3	1428.8	1425.3	1425.3	1446.0	1456.4	1463.2	1463.2	1463.2
10°	1812.7	1636.3	1487.6	1452.9	1463.2	1470.3	1494.4	1508.3	1515.3	1518.7	1522.1
12.5°	1906.2	1688.2	1522.1	1494.4	1508.3	1511.8	1529.1	1535.9	1542.8	1546.3	1546.3
15°	2030.6	1764.2	1577.5	1542.8	1546.3	1542.8	1542.8	1535.9	1532.5	1532.5	1539.3
17.5°	2158.6	1836.9	1625.9	1577.5	1563.6	1535.9	1515.3	1498.0	1487.6	1480.5	1484.1
20°	2286.6	1902.6	1653.6	1584.4	1546.3	1501.3	1463.2	1439.1	1425.3	1411.3	1418.3
22.5°	2414.6	1965.0	1663.9	1563.6	1508.3	1442.6	1401.0	1363.0	1331.8	1311.0	1314.5
25°	2556.4	2034.1	1663.9	1539.3	1456.4	1387.3	1335.3	1273.1	1228.1	1210.7	1217.7
27.5°	2698.2	2093.0	1646.7	1494.4	1397.6	1328.4	1252.2	1179.7	1151.9	1141.6	1145.0
30°	2840.1	2137.8	1608.5	1439.1	1335.3	1259.2	1158.9	1110.5	1075.9	1048.2	1051.6
32.5°	2982.0	2169.0	1556.8	1369.8	1269.6	1172.6	1089.6	1034.4	972.1	937.6	941.0
35°	3144.5	2193.2	1494.4	1300.7	1196.9	1096.7	1034.4	944.4	878.6	851.1	844.0
37.5°	3314.0	2210.5	1428.8	1224.6	1124.3	1041.2	979.1	868.3	806.0	768.1	764.5
40°	3497.5	2217.5	1349.2	1145.0	1055.1	1006.7	906.3	823.3	716.0	691.9	691.9
42.5°	3715.3	2214.0	1269.6	1065.5	979.1	927.1	854.5	816.4	723.0	698.8	685.0
45°	3964.4	2214.0	1183.1	972.1	902.8	826.8	795.7	771.5	709.1	719.5	726.5
47.5°	4248.1	2207.0	1079.4	896.0	840.6	774.9	757.6	705.7	681.5	688.5	695.3
50°	4638.9	2217.5	985.9	833.6	795.7	740.4	719.5	691.9	681.5	685.0	681.5
52.5°	5182.1	2182.8	896.0	795.7	761.0	688.5	688.5	685.0	688.5	685.0	685.0
55°	5479.7	2106.7	830.3	774.9	736.8	664.1	678.0	685.0	691.9	688.5	688.5
57.5°	5901.7	2054.9	778.3	761.0	723.0	657.3	671.2	685.0	688.5	685.0	685.0
60°	6399.7	2020.3	743.7	764.5	712.6	657.3	674.5	685.0	681.5	678.0	678.0
62.5°	6977.5	2006.5	719.5	774.9	702.2	660.8	674.5	685.0	671.2	667.6	667.6
65°	7195.5	1881.9	688.5	781.9	709.1	660.8	671.2	674.5	657.3	653.7	650.4
67.5°	6859.8	1667.4	643.5	768.1	730.0	660.8	660.8	657.3	636.4	633.0	626.2
70°	6109.2	1383.7	574.2	723.0	743.7	664.1	646.9	629.6	608.8	608.8	594.9
72.5°	5002.2	1089.6	484.2	643.5	733.3	674.5	619.2	594.9	570.9	570.9	556.9
75°	3604.5	813.0	387.4	536.2	688.5	671.2	584.6	553.4	525.8	522.4	505.0
77.5°	2054.9	570.9	314.8	418.6	612.4	653.7	553.4	505.0	473.9	463.5	453.1
80°	1055.1	383.9	255.9	328.6	508.5	605.4	529.3	449.7	415.1	397.8	380.5
82.5°	501.7	255.9	197.2	242.2	383.9	529.3	498.1	387.4	349.4	328.6	307.8
85°	224.8	152.3	131.4	155.6	273.3	411.7	439.4	318.3	273.3	342.4	252.6
87.5°	72.7	69.2	69.2	72.7	131.4	179.9	321.8	235.3	217.8	179.9	152.3
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)