

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: P236856

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236856
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-AF72-230-D-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27505.1 lumens
Efficiency: N/A
Efficacy: 120.1 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 - G4

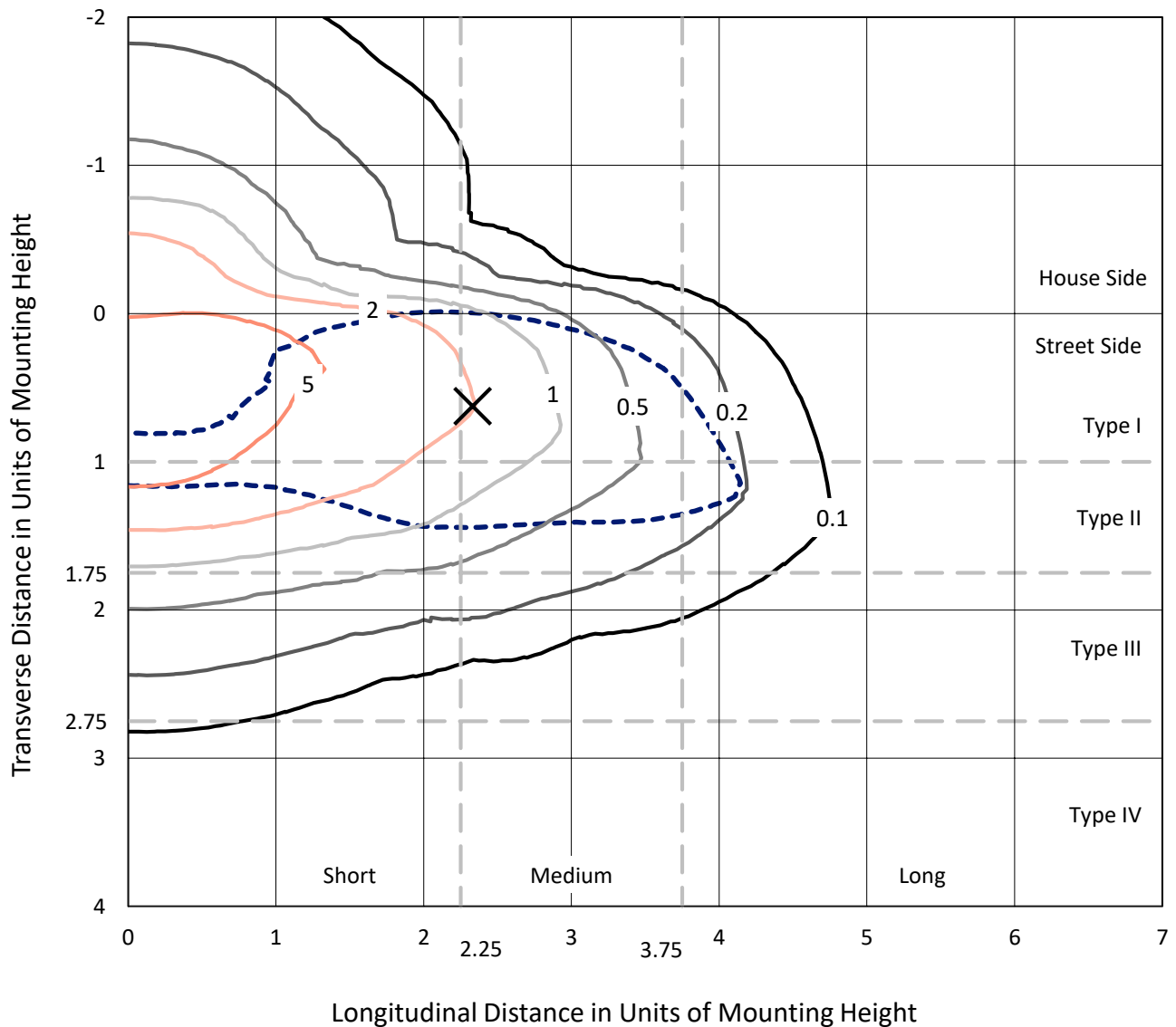
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

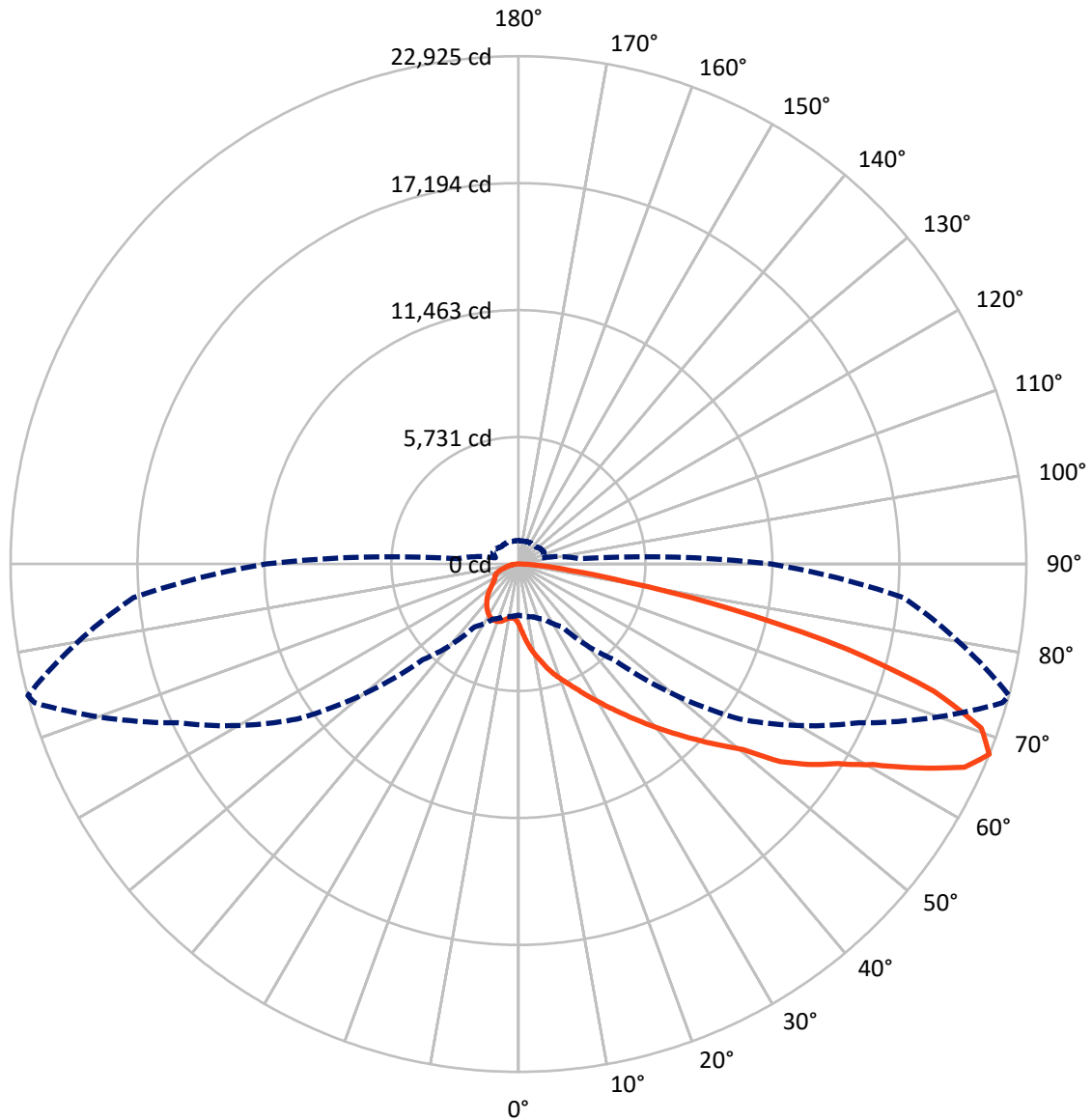


Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Medium - Semi-Cutoff

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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	4696.9	0.0	4696.9
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	22808.2	0.0	22808.2
	% Fixture	82.9	0.0	82.9
Total	Lumens	27505.1	0.0	27505.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.2	1.2
10°-20°	1157.1	4.2
20°-30°	2110.5	7.7
30°-40°	3464.2	12.6
40°-50°	5009.7	18.2
50°-60°	5903.9	21.5
60°-70°	5737.2	20.9
70°-80°	3189.1	11.6
80°-90°	613.2	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°	27505.1	100.0
0°-180°	27505.1	100.0



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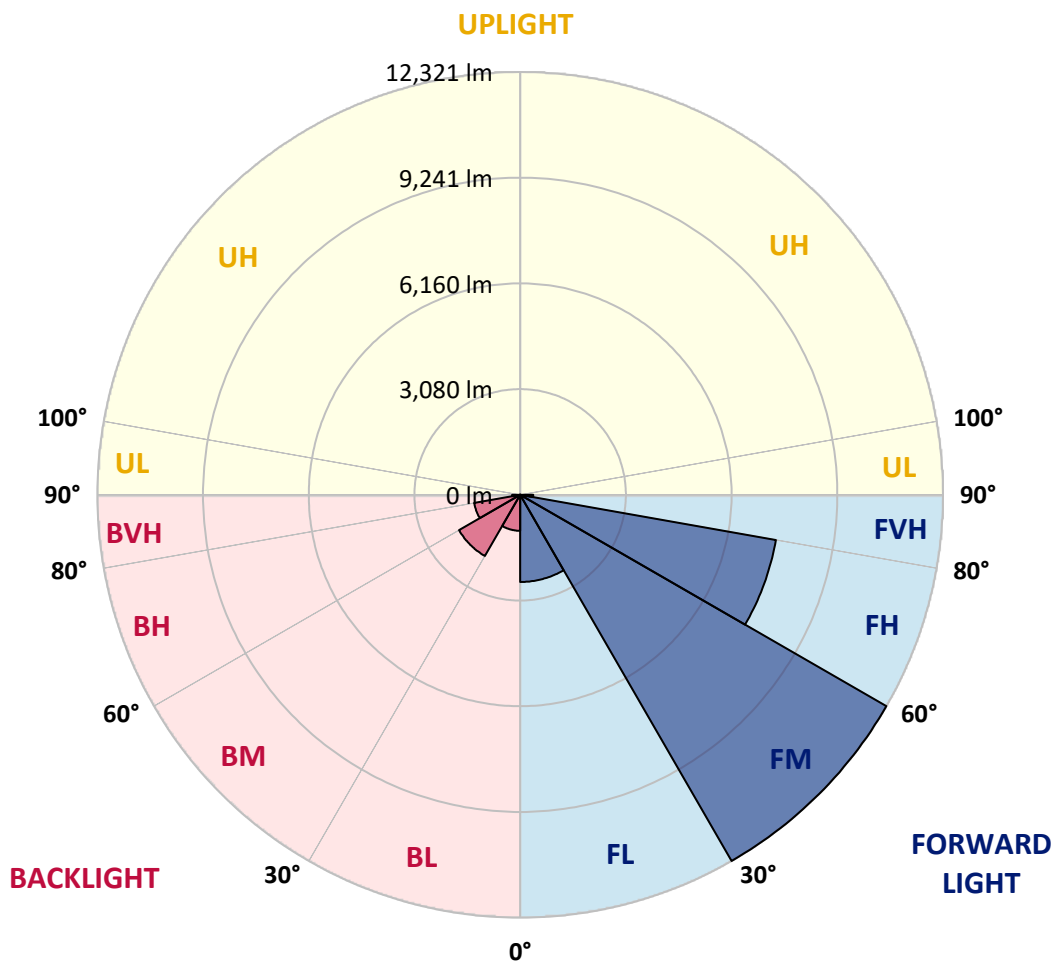
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2539.4	9.2			
FM	(30°-60°)	12320.8	44.8			
FH	(60°-80°)	7566.3	27.5			G4/12000
FVH	(80°-90°)	381.6	1.4			G3/500
BL	(0°-30°)	1048.3	3.8	B3/2500		
BM	(30°-60°)	2057.0	7.5	B2/2500		
BH	(60°-80°)	1360.0	4.9	B3/2500		G3/2500
BVH	(80°-90°)	231.6	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4
2.5°	3864.0	3875.4	3852.4	3800.8	3726.0	3588.0	3467.2	3254.5	3064.8	3041.7	2840.5
5°	4542.5	4554.0	4525.2	4462.0	4381.5	4231.9	4065.2	3789.2	3484.5	3427.0	3001.4
7.5°	5008.3	5014.0	4979.5	4916.2	4853.0	4703.4	4536.7	4226.2	3852.4	3806.5	3208.5
10°	5405.0	5416.4	5370.5	5330.2	5261.2	5111.7	4939.2	4611.5	4226.2	4163.0	3421.3
12.5°	5772.9	5784.5	5755.7	5721.3	5698.2	5560.2	5370.5	4979.5	4565.4	4496.5	3674.2
15°	6020.3	6031.7	6037.5	6083.5	6112.2	6014.4	5824.7	5399.2	4933.5	4870.3	3973.2
17.5°	5951.2	5980.0	6066.2	6232.9	6411.2	6417.0	6261.7	5813.2	5295.7	5226.8	4278.0
20°	5750.0	5772.9	5876.4	6129.4	6480.2	6681.5	6669.9	6232.9	5634.9	5560.2	4559.7
22.5°	5916.7	5945.5	5945.5	6100.7	6445.7	6819.5	6969.0	6646.9	5974.2	5905.2	4841.5
25°	6629.7	6646.9	6526.2	6463.0	6589.4	6934.5	7216.2	7095.5	6388.2	6307.7	5146.3
27.5°	7624.5	7595.7	7446.2	7193.2	7055.2	7147.3	7434.7	7520.9	6865.4	6767.7	5462.5
30°	8613.5	8596.2	8423.7	8084.5	7773.9	7578.4	7676.2	7900.5	7382.9	7268.0	5767.2
32.5°	9539.2	9510.5	9320.7	8923.9	8573.2	8210.9	8021.2	8245.5	7934.9	7802.7	6106.5
35°	10390.2	10315.4	10125.7	9711.7	9349.5	9004.4	8538.7	8573.2	8532.9	8394.9	6480.2
37.5°	11080.2	11022.7	10815.7	10430.4	10045.2	9717.4	9228.7	8946.9	9177.0	9044.7	6911.5
40°	11689.7	11626.4	11413.7	11028.4	10671.9	10361.5	9976.2	9401.2	9901.4	9752.0	7394.5
42.5°	12149.7	12103.7	11931.2	11551.7	11206.7	10924.9	10735.2	9976.2	10654.6	10510.9	7923.5
45°	12396.9	12350.9	12258.9	11954.2	11637.9	11419.4	11436.7	10660.5	11442.4	11321.7	8550.2
47.5°	12092.2	12126.7	12207.2	12149.7	11954.2	11850.7	12063.5	11367.6	12322.2	12207.2	9228.7
50°	11275.7	11310.2	11632.2	12029.0	12097.9	12224.5	12626.9	12184.2	13253.7	13161.7	10068.2
52.5°	9269.0	9458.7	10349.9	11298.7	11948.5	12471.7	13253.7	13397.4	14823.4	14823.4	11551.7
55°	7003.4	7170.2	8188.0	9844.0	11367.6	12494.7	13713.7	14219.6	15956.2	15979.2	12327.9
57.5°	5675.2	5778.8	6279.0	7975.2	10148.7	12207.2	14259.9	14926.9	16899.1	17002.7	13328.4
60°	4605.7	4663.2	4991.0	6169.7	8464.0	11431.0	14650.9	15938.9	18244.6	18388.4	14605.0
62.5°	3703.0	3760.5	3979.0	4686.2	6641.2	9976.2	14582.0	16991.2	20038.7	20274.4	16278.2
65°	2955.5	3018.7	3162.5	3599.5	4921.9	8170.7	13874.7	17531.6	21895.9	22125.9	17387.9
67.5°	2305.7	2363.2	2461.0	2748.5	3467.2	6112.2	12201.5	16962.4	22729.7	22925.1	17445.4
70°	1742.3	1771.0	1851.5	2035.5	2478.2	4059.5	9550.7	15053.4	21982.1	22160.4	16295.4
72.5°	1351.2	1345.5	1391.5	1483.5	1730.7	2794.5	6330.7	12241.7	19434.9	19618.9	13903.4
75°	1104.0	1098.2	1127.0	1155.7	1253.5	1874.5	3737.5	9217.2	15685.9	15335.2	10430.4
77.5°	931.5	925.8	954.5	960.2	1000.4	1293.7	2127.5	6066.2	10465.0	9861.2	5876.4
80°	787.8	782.0	816.5	828.0	856.7	948.8	1224.8	3283.3	5255.5	4979.5	2806.0
82.5°	592.3	615.2	678.5	707.3	741.7	701.5	759.0	1449.0	2438.0	2328.7	1218.9
85°	287.4	339.2	511.8	569.3	609.5	442.7	517.5	684.3	1098.2	1046.5	494.5
87.5°	97.8	86.2	304.7	362.2	396.7	201.2	287.4	379.5	454.3	414.0	155.3
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°	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4	2725.4
2.5°	2754.2	2668.0	2541.5	2443.7	2380.5	2328.7	2305.7	2300.0	2288.4	2282.7	2282.7
5°	2811.8	2656.5	2461.0	2357.5	2328.7	2305.7	2317.2	2323.0	2323.0	2323.0	2323.0
7.5°	2898.0	2679.5	2443.7	2374.8	2368.9	2368.9	2403.5	2420.7	2432.3	2432.3	2432.3
10°	3013.0	2719.7	2472.5	2415.0	2432.3	2443.7	2484.0	2506.9	2518.5	2524.2	2530.0
12.5°	3168.3	2806.0	2530.0	2484.0	2506.9	2512.8	2541.5	2553.0	2564.5	2570.3	2570.3
15°	3375.2	2932.5	2622.0	2564.5	2570.3	2564.5	2564.5	2553.0	2547.2	2547.2	2558.7
17.5°	3588.0	3053.2	2702.5	2622.0	2599.0	2553.0	2518.5	2489.8	2472.5	2461.0	2466.7
20°	3800.8	3162.5	2748.5	2633.5	2570.3	2495.5	2432.3	2392.0	2368.9	2346.0	2357.5
22.5°	4013.4	3266.0	2765.8	2599.0	2506.9	2397.7	2328.7	2265.5	2213.8	2179.2	2185.0
25°	4249.2	3381.0	2765.8	2558.7	2420.7	2305.7	2219.5	2116.0	2041.2	2012.5	2024.0
27.5°	4485.0	3478.7	2737.0	2484.0	2323.0	2208.0	2081.5	1960.7	1914.8	1897.5	1903.2
30°	4720.7	3553.5	2673.7	2392.0	2219.5	2093.0	1926.2	1845.7	1788.2	1742.3	1748.0
32.5°	4956.5	3605.2	2587.5	2277.0	2110.2	1949.2	1811.2	1719.3	1615.8	1558.3	1564.0
35°	5226.8	3645.5	2484.0	2162.0	1989.5	1822.7	1719.3	1569.7	1460.5	1414.5	1403.0
37.5°	5508.5	3674.2	2374.8	2035.5	1868.7	1730.7	1627.2	1443.3	1339.8	1276.5	1270.7
40°	5813.2	3685.7	2242.5	1903.2	1753.7	1673.2	1506.5	1368.5	1190.2	1150.0	1150.0
42.5°	6175.5	3680.0	2110.2	1771.0	1627.2	1541.0	1420.3	1356.9	1201.8	1161.5	1138.5
45°	6589.4	3680.0	1966.5	1615.8	1500.8	1374.2	1322.5	1282.3	1178.7	1196.0	1207.5
47.5°	7060.9	3668.5	1793.9	1489.2	1397.2	1288.0	1259.3	1173.0	1132.7	1144.3	1155.7
50°	7710.7	3685.7	1638.8	1385.8	1322.5	1230.5	1196.0	1150.0	1132.7	1138.5	1132.7
52.5°	8613.5	3628.2	1489.2	1322.5	1265.0	1144.3	1144.3	1138.5	1144.3	1138.5	1138.5
55°	9107.9	3501.8	1380.0	1288.0	1224.8	1104.0	1127.0	1138.5	1150.0	1144.3	1144.3
57.5°	9809.5	3415.5	1293.7	1265.0	1201.8	1092.5	1115.5	1138.5	1144.3	1138.5	1138.5
60°	10637.5	3357.9	1236.2	1270.7	1184.5	1092.5	1121.3	1138.5	1132.7	1127.0	1127.0
62.5°	11597.7	3335.0	1196.0	1288.0	1167.3	1098.2	1121.3	1138.5	1115.5	1109.7	1109.7
65°	11959.9	3128.0	1144.3	1299.5	1178.7	1098.2	1115.5	1121.3	1092.5	1086.8	1081.0
67.5°	11402.2	2771.5	1069.5	1276.5	1213.2	1098.2	1098.2	1092.5	1058.0	1052.2	1040.8
70°	10154.4	2300.0	954.5	1201.8	1236.2	1104.0	1075.2	1046.5	1012.0	1012.0	989.0
72.5°	8314.4	1811.2	805.0	1069.5	1218.9	1121.3	1029.3	989.0	948.8	948.8	925.8
75°	5991.4	1351.2	643.9	891.2	1144.3	1115.5	971.7	920.0	874.0	868.3	839.5
77.5°	3415.5	948.8	523.2	695.7	1017.7	1086.8	920.0	839.5	787.8	770.5	753.2
80°	1753.7	638.2	425.5	546.3	845.3	1006.3	879.7	747.5	690.0	661.2	632.5
82.5°	833.7	425.5	327.8	402.5	638.2	879.7	828.0	643.9	580.7	546.3	511.8
85°	373.8	253.0	218.5	258.7	454.3	684.3	730.3	529.0	454.3	569.3	419.7
87.5°	120.7	115.0	115.0	120.7	218.5	299.0	534.7	391.0	362.2	299.0	253.0
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)