

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: P300373

Luminaire Tested: **GAA-AF-04-LED-U-AFL-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300373  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-04-LED-U-AFL-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

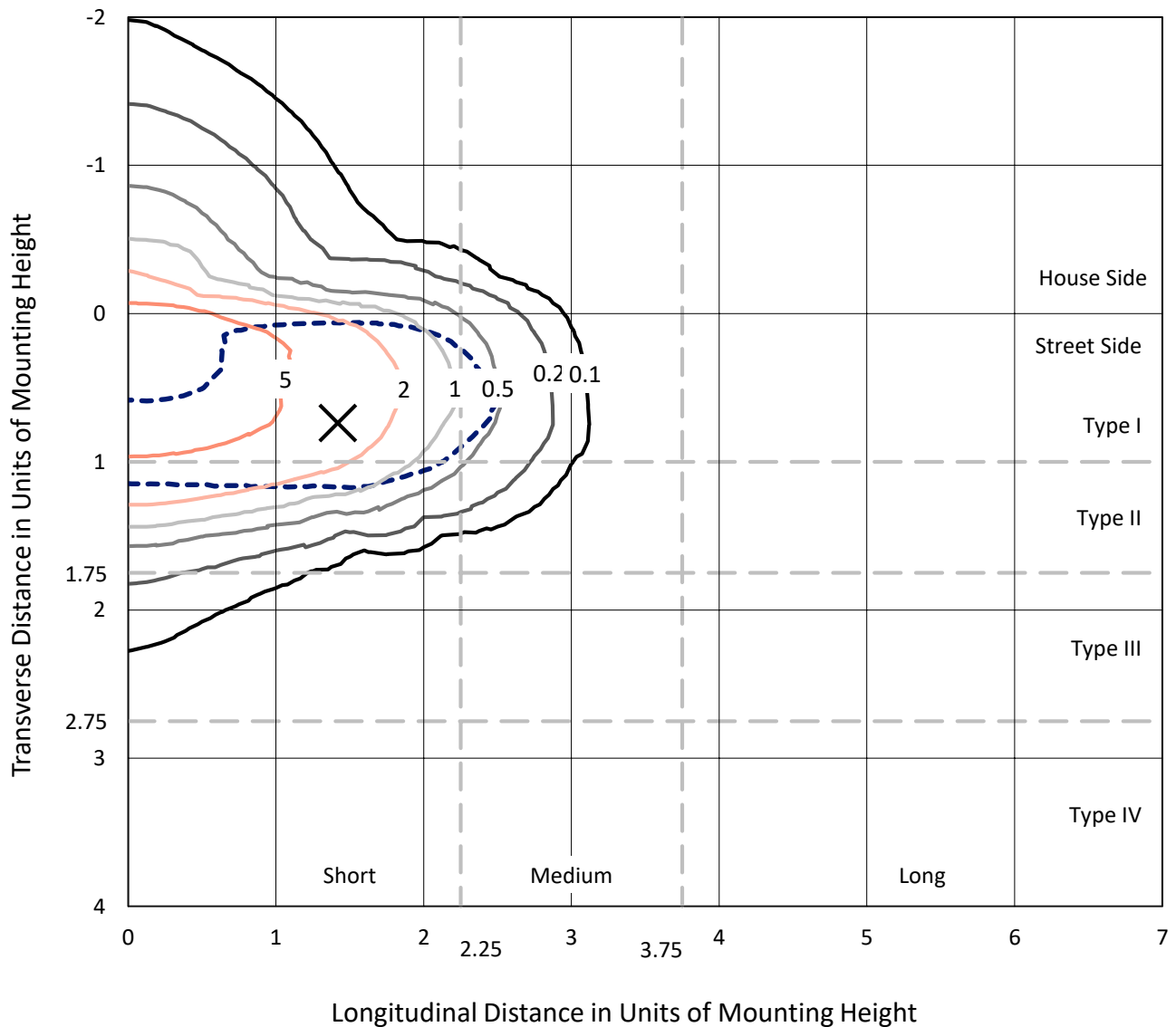
Lumens per Lamp: N/A  
Luminaire Lumens: 17231.7 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 171  
Input Voltage (V): NR  
Input Current (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

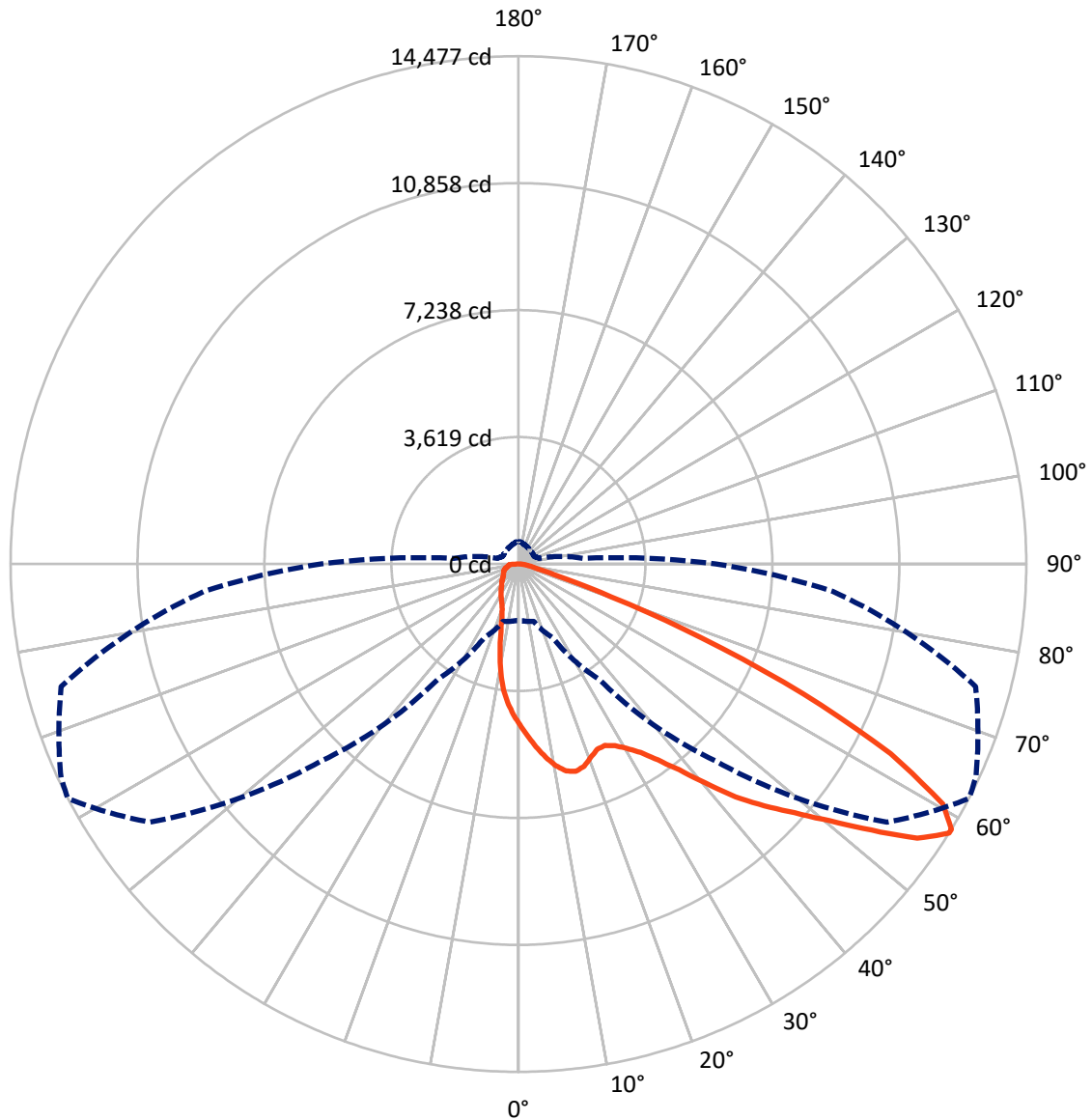
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2627.9	0.0	2627.9
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	14603.8	0.0	14603.8
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	17231.7	0.0	17231.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.4	2.4
10°-20°	1046.4	6.1
20°-30°	1691.6	9.8
30°-40°	2685.3	15.6
40°-50°	3929.2	22.8
50°-60°	4109.6	23.8
60°-70°	2428.0	14.1
70°-80°	684.0	4.0
80°-90°	248.3	1.4
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°	17231.7	100.0
0°-180°	17231.7	100.0

**Coefficient of Utilization**



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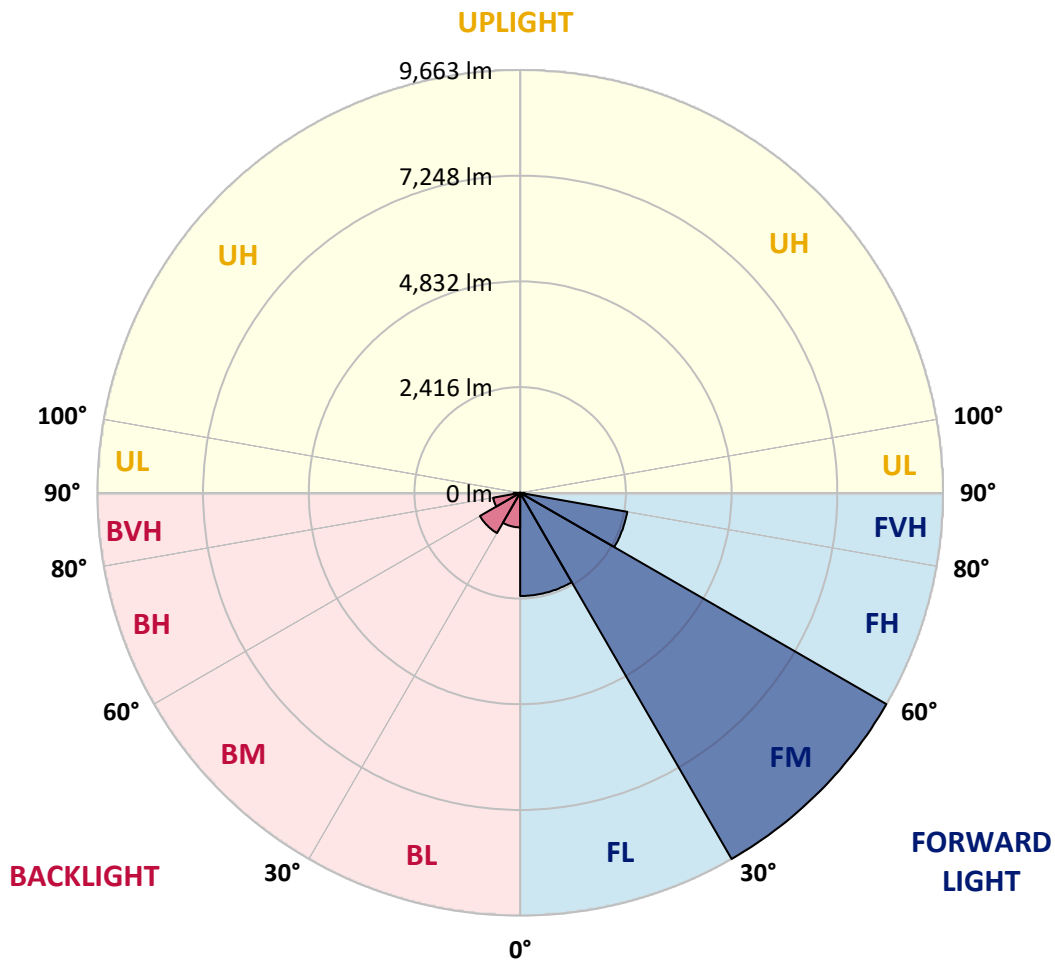
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2357.5	13.7			
FM	(30°-60°)	9663.5	56.1			
FH	(60°-80°)	2484.9	14.4			G2/5000
FVH	(80°-90°)	98.0	0.6			G1/100
BL	(0°-30°)	789.8	4.6	B2/1000		
BM	(30°-60°)	1060.7	6.2	B2/2500		
BH	(60°-80°)	627.0	3.6	B2/1000		G2/1000
BVH	(80°-90°)	150.4	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3
2.5°	5230.5	5188.3	5161.5	5138.0	5107.1	5041.4	4953.0	4897.0	4868.6	4772.0	4657.6
5°	5743.3	5706.0	5678.4	5646.7	5591.5	5488.5	5345.7	5232.1	5176.1	4983.0	4754.2
7.5°	5623.2	5638.6	5686.5	5770.1	5841.5	5827.7	5700.3	5555.8	5482.0	5213.4	4866.1
10°	4899.4	4926.2	5008.9	5204.5	5521.0	5845.5	5944.5	5844.7	5770.1	5441.4	4981.4
12.5°	4754.2	4753.3	4759.8	4811.8	5000.0	5456.9	5952.6	6053.3	6008.6	5658.9	5099.0
15°	4813.4	4815.0	4810.1	4832.1	4890.5	5071.4	5704.3	6133.6	6165.2	5878.0	5220.7
17.5°	4969.2	4965.1	4946.5	4946.5	4967.6	5038.2	5412.2	6058.9	6205.0	6071.9	5327.8
20°	5230.5	5211.8	5162.3	5116.9	5094.1	5132.3	5292.1	5886.9	6136.0	6241.5	5416.3
22.5°	5546.9	5532.3	5452.0	5354.6	5275.9	5275.1	5353.8	5736.8	6016.7	6401.4	5490.9
25°	5955.9	5932.3	5813.1	5657.3	5519.3	5466.6	5488.5	5729.5	5951.8	6575.0	5557.5
27.5°	6436.2	6393.2	6252.1	6027.3	5824.4	5718.1	5686.5	5861.8	6011.1	6790.0	5650.0
30°	7018.8	6969.4	6788.4	6495.5	6209.0	6034.6	5967.2	6096.3	6207.4	7052.1	5798.5
32.5°	7681.8	7610.4	7401.0	7078.1	6701.6	6435.4	6325.9	6406.2	6494.7	7367.8	5984.3
35°	8597.9	8512.7	8210.0	7764.6	7339.4	6973.4	6798.1	6856.6	6942.6	7838.4	6252.9
37.5°	9222.7	9184.5	8983.3	8564.6	8102.1	7681.0	7410.0	7444.0	7492.7	8426.7	6596.9
40°	9217.0	9232.4	9236.5	9240.5	8925.7	8522.4	8231.1	8195.4	8185.7	9072.6	6988.0
42.5°	8755.3	8818.6	9023.1	9437.7	9629.2	9444.2	9177.2	9074.2	9023.1	9833.7	7402.7
45°	8048.6	8082.6	8465.6	9275.4	9989.5	10357.1	10155.0	9830.4	9737.9	10533.1	7746.7
47.5°	7684.2	7721.5	7962.5	8845.4	9985.4	11094.7	11211.5	10593.2	10427.7	11141.7	8043.7
50°	6816.8	6894.7	7198.2	8097.2	9621.1	11433.8	12315.8	11502.0	11159.6	11734.1	8341.5
52.5°	5224.0	5344.1	5684.1	6867.1	8696.9	11265.9	13199.5	12603.9	12120.3	12347.5	8597.1
55°	3295.2	3384.5	3670.1	4849.9	6957.2	10392.0	13534.6	13795.9	13365.8	12928.5	8818.6
57.5°	1791.6	1831.4	1938.5	2677.7	4525.3	8459.9	13046.1	14474.2	14295.7	13421.8	8985.8
58°	1603.4	1630.2	1696.7	2320.7	4013.3	7931.7	12829.5	14476.7	14387.4	13494.0	8998.7
60°	1189.6	1175.8	1116.5	1324.2	2233.9	5479.6	11519.8	13897.3	14159.4	13582.5	8935.4
62.5°	1045.1	1011.9	890.9	877.2	1086.5	2524.4	8814.5	11904.5	12523.6	13077.8	8550.8
65°	981.8	946.1	790.3	740.0	783.8	1067.8	5192.3	8928.1	9704.7	11547.4	7567.4
67.5°	934.8	888.5	726.2	657.3	660.5	705.9	2081.3	5623.2	6497.1	8767.5	5886.1
70°	889.3	839.0	671.9	592.3	573.7	558.3	827.7	2814.8	3607.6	5538.0	3752.9
72.5°	840.6	791.1	624.0	541.2	504.7	453.6	540.4	1151.4	1608.2	2620.1	1702.4
75°	770.0	725.4	576.1	495.8	443.9	375.7	408.1	601.3	721.4	1043.5	820.4
77.5°	683.2	646.7	522.6	458.5	393.5	305.1	314.0	417.1	462.5	597.2	487.7
80°	490.9	503.9	464.9	412.2	350.5	247.5	241.0	304.3	328.6	383.8	317.3
82.5°	344.9	352.2	384.6	336.7	289.7	194.7	177.7	214.2	228.8	252.4	171.2
85°	237.7	229.6	263.7	234.5	209.3	129.8	121.7	145.2	154.2	156.6	88.4
87.5°	142.8	142.8	152.5	125.8	112.8	67.3	65.7	82.8	88.4	84.4	48.7
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°	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3	4577.3
2.5°	4589.4	4531.8	4409.3	4311.1	4187.0	4057.9	3985.7	3908.6	3855.9	3817.8	3878.6
5°	4624.3	4506.7	4253.5	4013.3	3748.0	3472.1	3262.8	3068.0	2932.5	2848.1	2927.6
7.5°	4679.5	4498.6	4095.3	3684.7	3208.4	2749.1	2338.5	2081.3	1931.2	1857.4	1903.6
10°	4742.8	4485.6	3909.5	3239.2	2557.6	1979.1	1672.4	1568.5	1534.4	1520.6	1527.1
12.5°	4795.5	4458.0	3681.4	2700.4	1920.6	1562.8	1474.4	1471.9	1479.2	1480.9	1483.3
15°	4832.9	4417.4	3343.1	2138.9	1536.0	1424.1	1419.2	1433.8	1447.6	1453.3	1456.5
17.5°	4858.0	4333.8	2960.9	1691.0	1376.2	1356.7	1368.1	1386.7	1401.3	1405.4	1408.6
20°	4855.6	4211.3	2505.7	1410.3	1289.4	1289.4	1308.8	1323.4	1324.2	1319.4	1321.8
22.5°	4830.4	4043.3	2064.3	1261.0	1212.3	1226.1	1245.5	1231.7	1174.9	1137.6	1140.1
25°	4788.2	3842.9	1686.1	1166.0	1140.9	1165.2	1159.5	1055.7	974.5	938.0	938.0
27.5°	4750.9	3606.0	1395.7	1083.3	1069.5	1099.5	998.9	904.7	870.7	853.6	847.9
30°	4724.1	3350.4	1201.7	1003.7	1002.1	980.2	866.6	840.6	835.0	821.2	816.3
32.5°	4730.6	3091.5	1077.6	934.0	939.6	839.0	803.3	809.0	804.1	789.5	783.0
35°	4784.2	2845.7	996.4	870.7	853.6	757.9	766.0	776.5	774.9	754.6	748.1
37.5°	4879.9	2612.8	942.9	817.9	744.9	717.3	730.3	746.5	742.5	728.7	723.8
40°	4980.5	2393.7	899.1	776.5	680.8	689.7	701.1	710.0	714.1	718.1	714.9
42.5°	5078.7	2164.9	845.5	734.3	654.0	663.7	668.6	677.5	699.5	714.9	714.1
45°	5137.1	1949.9	790.3	674.3	632.9	638.6	635.3	653.2	680.0	705.1	705.9
47.5°	5202.1	1782.7	746.5	619.1	612.6	616.7	606.9	624.8	649.1	680.0	683.2
50°	5280.8	1682.9	711.6	575.3	585.0	585.0	582.6	598.8	632.9	668.6	675.1
52.5°	5370.0	1663.4	682.4	543.7	557.5	556.6	559.1	583.4	620.7	655.6	661.3
55°	5478.8	1716.2	650.8	520.1	530.7	533.9	542.0	569.6	601.3	641.0	643.5
57.5°	5605.3	1823.3	625.6	501.5	506.3	516.9	529.9	555.0	589.1	632.9	635.3
58°	5626.4	1846.0	621.6	499.8	501.5	513.6	528.2	552.6	586.7	634.5	637.0
60°	5627.3	1921.5	612.6	492.5	482.8	503.1	519.3	543.7	582.6	640.2	645.9
62.5°	5427.6	1920.6	606.1	482.0	463.3	488.5	507.1	535.5	578.5	654.0	665.4
65°	4779.3	1745.4	575.3	465.8	447.9	475.5	496.6	529.9	589.9	714.1	721.4
67.5°	3738.2	1430.5	517.7	443.0	427.6	462.5	490.1	529.1	602.1	727.9	732.7
70°	2471.6	1070.3	454.4	417.1	406.5	447.1	493.3	556.6	588.3	698.6	685.7
72.5°	1282.9	751.4	403.3	384.6	382.2	433.3	540.4	553.4	574.5	657.3	641.0
75°	673.5	521.7	358.7	348.9	353.0	430.1	637.8	538.8	556.6	628.9	659.7
77.5°	412.2	421.1	320.5	316.5	324.6	420.3	637.0	520.1	530.7	578.5	612.6
80°	275.9	341.6	291.3	292.1	297.8	384.6	572.1	490.9	499.0	546.9	581.8
82.5°	174.5	202.0	264.5	278.3	271.0	317.3	486.0	447.1	458.5	625.6	661.3
85°	88.4	126.6	229.6	267.8	244.2	222.3	394.4	391.9	397.6	451.2	471.4
87.5°	40.6	69.8	179.3	233.7	184.2	138.8	286.4	290.5	313.2	320.5	320.5
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)