

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: LUMARK

Report Number: P884661

Luminaire Tested: **NAV-SB5C-827-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30518 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

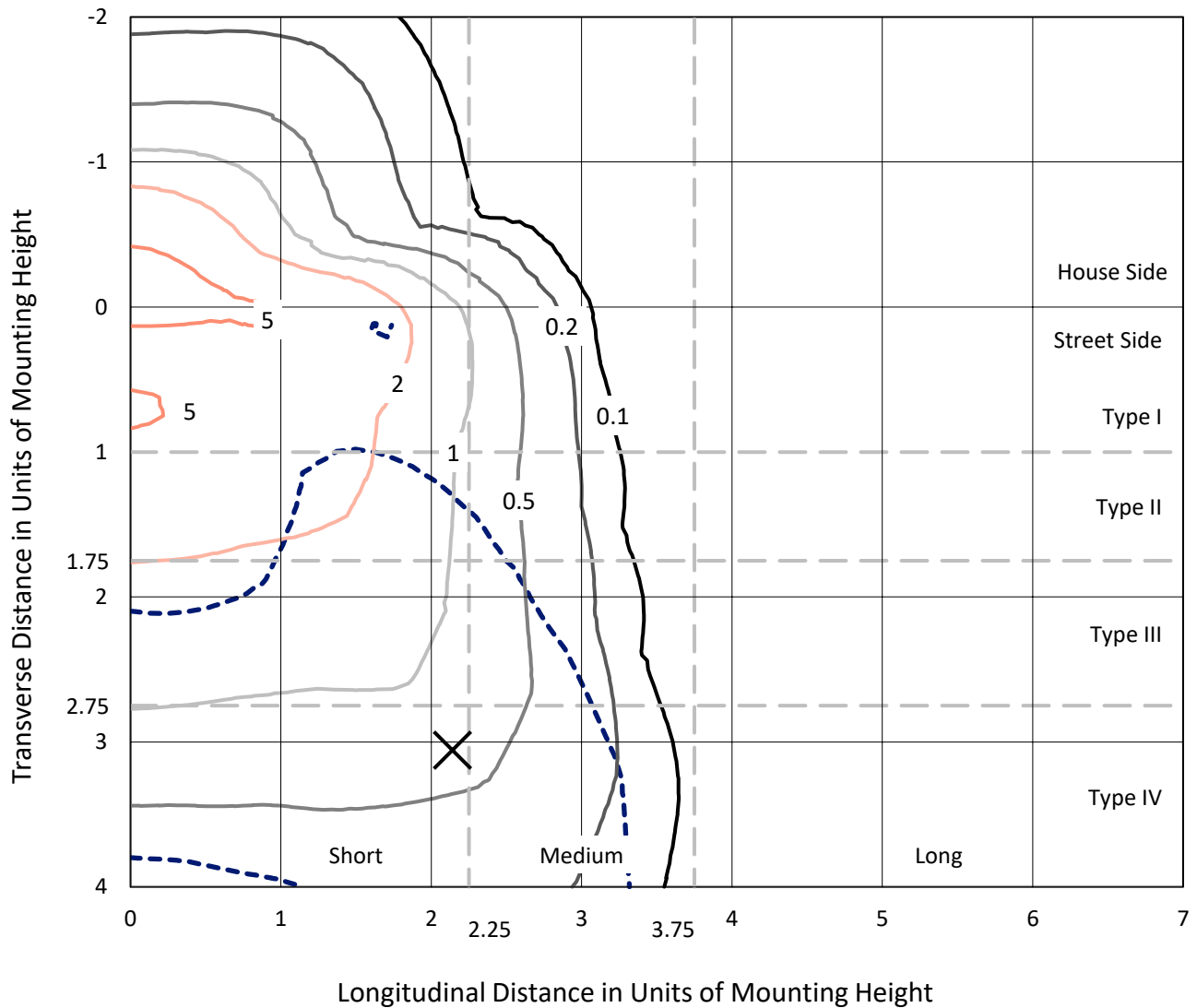
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

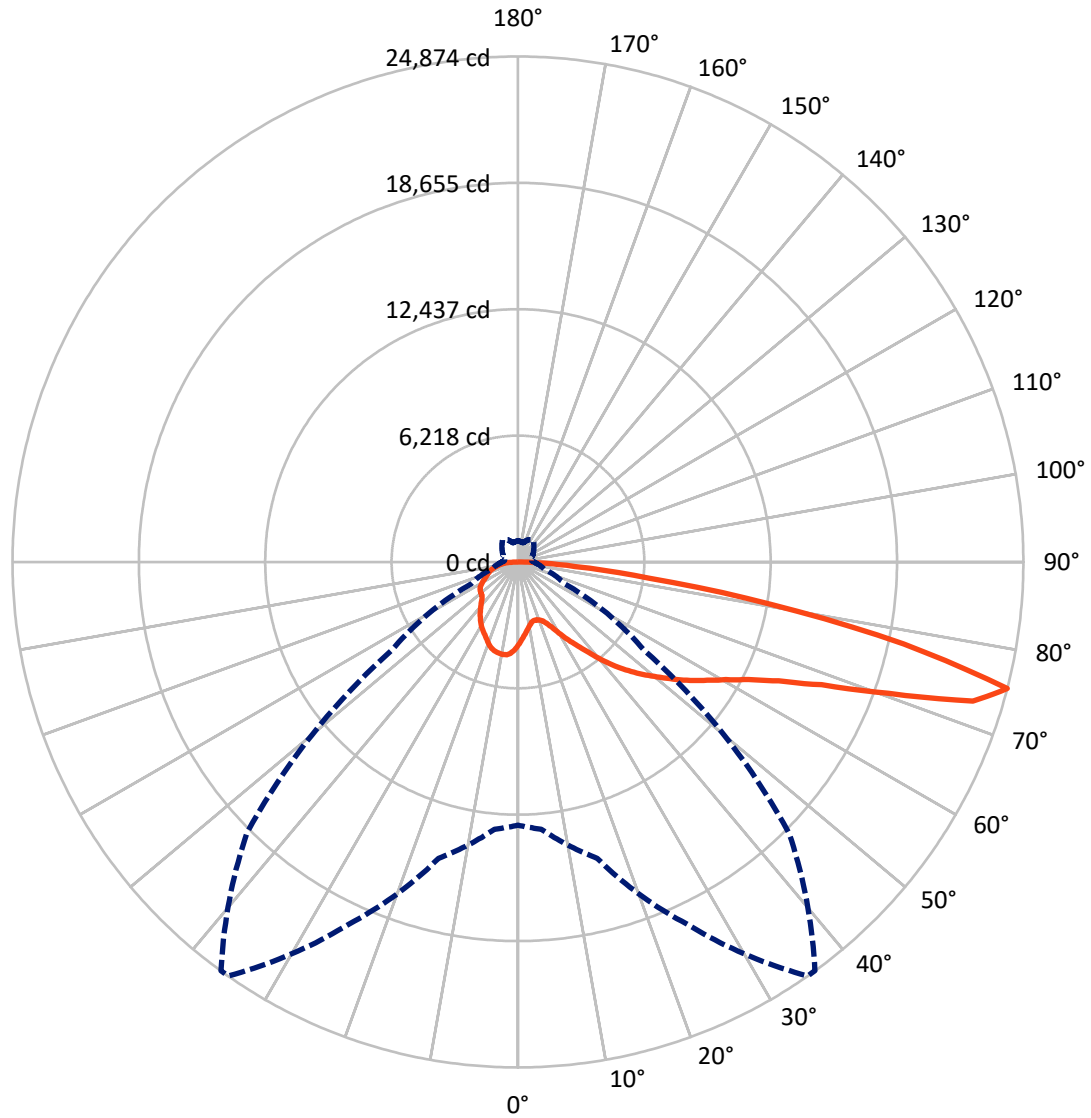
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7262.5	0.0	7262.5
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	23255.5	0.0	23255.5
	% Fixture	76.2	0.0	76.2
Total	Lumens	30518.0	0.0	30518.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.0	1.3
10°-20°	1110.6	3.6
20°-30°	1865.0	6.1
30°-40°	2898.5	9.5
40°-50°	4302.1	14.1
50°-60°	5939.4	19.5
60°-70°	7205.8	23.6
70°-80°	5955.0	19.5
80°-90°	856.5	2.8
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°	30518.0	100.0
0°-180°	30518.0	100.0

Coefficient of Utilization



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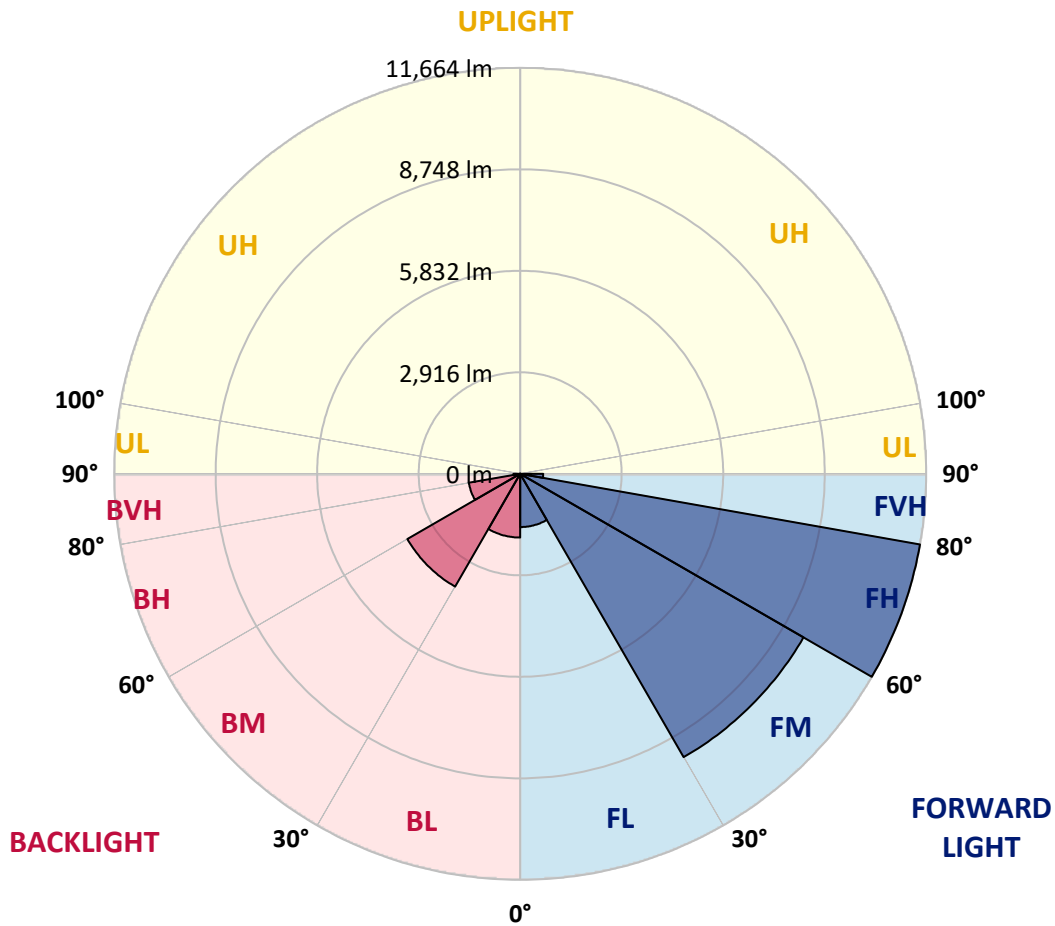
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1530.4	5.0			
FM (30°-60°)	9397.9	30.8			
FH (60°-80°)	11663.5	38.2			G4/12000
FVH (80°-90°)	663.7	2.2			G4/750
BL (0°-30°)	1830.3	6.0	B3/2500		
BM (30°-60°)	3742.1	12.3	B3/5000		
BH (60°-80°)	1497.3	4.9	B3/2500		G3/2500
BVH (80°-90°)	192.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7
2.5°	3750.0	3773.1	3783.0	3778.0	3802.8	3799.5	3834.1	3877.0	3936.4	3994.1	4078.3
5°	3461.3	3486.0	3507.5	3527.2	3575.1	3589.9	3644.4	3726.9	3835.8	3946.3	4084.9
7.5°	3192.3	3213.8	3246.8	3283.1	3363.9	3378.8	3469.5	3598.2	3750.0	3911.6	4103.0
10°	2972.9	2994.4	3029.0	3070.3	3170.9	3189.0	3304.5	3476.1	3674.1	3878.7	4122.8
12.5°	2878.9	2885.5	2905.3	2946.5	3034.0	3045.5	3172.5	3368.9	3599.8	3853.9	4152.5
15°	2873.9	2887.1	2888.8	2910.2	2982.8	2987.8	3104.9	3299.6	3553.6	3849.0	4197.1
17.5°	2923.4	2933.3	2918.5	2931.7	2992.7	3001.0	3093.4	3266.6	3538.8	3870.4	4273.0
20°	3055.4	3063.7	3019.1	3001.0	3045.5	3052.1	3142.8	3288.0	3553.6	3914.9	4376.9
22.5°	3335.9	3340.8	3231.9	3157.7	3161.0	3164.3	3243.5	3375.5	3611.4	3995.8	4508.9
25°	3773.1	3769.8	3596.5	3453.0	3370.5	3352.4	3405.2	3517.4	3708.7	4103.0	4678.8
27.5°	4284.5	4259.8	4086.5	3872.1	3692.2	3665.8	3654.3	3702.1	3847.3	4244.9	4886.7
30°	4861.9	4838.8	4652.4	4371.9	4122.8	4079.9	3971.0	3946.3	4053.5	4437.9	5175.4
32.5°	5495.4	5480.6	5257.9	4918.0	4584.8	4535.3	4352.1	4286.2	4370.3	4729.9	5577.9
35°	6026.7	6013.5	5828.7	5478.9	5071.5	5010.4	4824.0	4749.7	4792.6	5104.4	6104.2
37.5°	6506.8	6500.2	6341.8	6066.3	5645.6	5571.3	5361.8	5337.1	5328.8	5597.7	6742.7
40°	6952.2	6935.7	6770.7	6625.6	6313.7	6246.1	6061.3	6039.9	5977.2	6204.9	7465.3
42.5°	7445.5	7402.6	7163.4	7095.7	7011.6	6955.5	6845.0	6848.3	6709.7	6889.5	8230.8
45°	7848.0	7823.3	7577.5	7537.9	7628.6	7605.5	7701.2	7726.0	7457.0	7607.2	9026.0
47.5°	8280.3	8257.2	8049.3	8021.3	8267.1	8273.7	8611.9	8620.1	8186.3	8352.9	9822.8
50°	8813.2	8780.2	8574.0	8608.6	8884.1	8908.9	9527.5	9471.4	8857.7	9110.1	10613.1
52.5°	9164.6	9184.4	9139.8	9195.9	9572.1	9595.2	10428.3	10284.8	9522.6	9857.5	11388.5
55°	9423.6	9463.2	9601.8	9730.5	10298.0	10321.1	11278.0	11058.5	10073.6	10550.4	12117.7
57.5°	9756.9	9700.8	9959.8	10210.5	10987.6	11048.6	12104.5	11804.2	10561.9	11147.6	12617.6
60°	10235.3	10195.7	10397.0	10768.2	11759.7	11857.0	12978.9	12475.7	10920.0	11621.1	12714.9
62.5°	11205.4	11106.4	11137.7	11466.0	12733.1	12861.8	13965.5	13061.4	11098.1	11805.9	12193.6
65°	12655.5	12485.6	12327.2	12554.9	14104.0	14231.1	15079.1	13521.7	11032.1	11447.9	10809.4
67.5°	14481.8	14313.6	14118.9	14333.4	16123.4	16224.0	16453.3	13780.7	10512.5	10068.7	8362.8
70°	15988.1	15925.4	16158.0	17040.7	19348.7	19352.0	18215.3	13566.2	9088.7	7138.6	4838.8
72.5°	15788.5	15750.5	16976.3	19705.1	23413.8	23326.4	19883.3	11942.8	6122.4	3220.4	1813.1
75°	12952.5	13198.3	15097.2	19657.2	24873.9	24862.3	18862.0	7592.3	2532.4	1334.7	937.1
77.5°	6945.6	7335.0	9801.4	14513.2	19418.0	19710.0	13261.0	2656.2	1087.2	854.6	648.4
80°	2265.2	2605.0	3906.7	7389.4	12617.6	12563.1	5683.5	1042.7	744.1	605.5	448.7
82.5°	961.8	1001.4	1745.5	3489.3	6475.4	6374.8	1809.8	598.9	523.0	414.1	277.2
85°	376.2	420.7	770.5	1613.5	2804.6	2743.6	653.3	297.0	334.9	270.6	165.0
87.5°	123.7	150.1	275.5	552.7	872.7	841.4	160.0	102.3	145.2	123.7	59.4
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°	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7	4066.7
2.5°	4101.4	4127.8	4159.1	4205.3	4244.9	4277.9	4312.5	4334.0	4342.2	4367.0	4365.3
5°	4131.1	4188.8	4266.4	4342.2	4416.5	4461.0	4500.6	4520.4	4538.6	4551.8	4555.1
7.5°	4180.6	4254.8	4376.9	4475.9	4538.6	4574.9	4601.3	4594.7	4601.3	4604.6	4609.5
10°	4223.5	4327.4	4472.6	4566.6	4614.5	4616.1	4609.5	4586.4	4574.9	4576.5	4579.8
12.5°	4274.6	4390.1	4546.8	4626.0	4639.2	4602.9	4574.9	4535.3	4520.4	4513.8	4510.5
15°	4343.9	4475.9	4627.7	4657.4	4624.4	4578.2	4530.3	4466.0	4433.0	4406.6	4414.8
17.5°	4428.0	4573.2	4690.4	4668.9	4598.0	4522.1	4444.5	4347.2	4279.6	4251.5	4253.2
20°	4545.2	4675.5	4738.2	4644.2	4536.9	4421.4	4289.5	4170.7	4108.0	4079.9	4076.6
22.5°	4687.1	4812.4	4784.4	4601.3	4449.5	4264.7	4099.7	4012.3	3980.9	3961.1	3964.4
25°	4857.0	4964.2	4817.4	4538.6	4305.9	4056.8	3929.8	3901.8	3886.9	3872.1	3872.1
27.5°	5078.1	5135.8	4842.1	4446.2	4081.6	3835.8	3789.6	3794.5	3789.6	3764.8	3769.8
30°	5370.1	5358.5	4865.2	4296.1	3824.2	3636.1	3639.4	3660.9	3664.2	3647.7	3655.9
32.5°	5754.5	5637.3	4876.8	4101.4	3578.4	3461.3	3464.6	3487.7	3504.2	3476.1	3489.3
35°	6219.7	5962.3	4858.6	3857.2	3388.7	3294.6	3269.9	3276.5	3281.4	3255.0	3273.2
37.5°	6762.5	6326.9	4777.8	3586.6	3231.9	3131.3	3078.5	3034.0	3007.6	2982.8	2999.3
40°	7358.1	6724.5	4629.3	3322.7	3057.1	2958.1	2878.9	2794.7	2705.7	2672.7	2687.5
42.5°	7981.7	7133.7	4449.5	3070.3	2855.8	2774.9	2690.8	2568.7	2435.1	2367.4	2375.7
45°	8628.4	7552.7	4273.0	2821.1	2649.6	2614.9	2517.6	2370.7	2225.6	2139.8	2133.2
47.5°	9261.9	7948.7	4013.9	2570.4	2456.5	2494.5	2418.6	2283.3	2121.6	1986.3	1971.5
50°	9867.4	8319.9	3589.9	2316.3	2299.8	2458.2	2385.6	2190.9	2006.1	1832.9	1818.1
52.5°	10467.9	8620.1	3047.2	2085.3	2215.7	2448.3	2342.7	2128.2	1902.2	1720.7	1700.9
55°	10977.7	8775.2	2524.2	1887.4	2093.6	2364.1	2291.6	2054.0	1755.4	1562.4	1545.9
57.5°	11268.1	8649.8	2088.6	1692.7	1925.3	2225.6	2204.1	1895.6	1580.5	1432.0	1412.2
60°	11142.7	8141.7	1732.3	1522.8	1765.3	2075.4	2052.3	1738.9	1446.9	1306.6	1286.8
62.5°	10451.4	7173.3	1450.2	1374.3	1620.1	1922.0	1900.6	1618.4	1344.6	1209.3	1187.8
65°	9059.0	5835.3	1230.7	1250.5	1473.3	1737.2	1768.6	1517.8	1263.7	1131.8	1110.3
67.5°	6909.3	4226.8	1059.2	1143.3	1329.7	1555.8	1646.5	1445.2	1196.1	1070.7	1050.9
70°	3938.0	2400.4	914.0	1039.4	1202.7	1387.5	1552.5	1387.5	1123.5	1019.6	1006.4
72.5°	1493.1	1102.1	790.2	935.4	1080.6	1245.6	1448.5	1296.7	1039.4	961.8	948.6
75°	796.8	671.5	664.9	813.3	940.4	1107.0	1318.2	1207.6	976.7	1016.3	1049.3
77.5°	542.8	475.1	556.0	696.2	786.9	953.6	1179.6	1072.4	846.3	843.0	777.1
80°	376.2	336.6	452.0	560.9	608.8	801.8	1029.5	920.6	689.6	643.4	615.4
82.5°	226.0	219.4	338.2	419.0	430.6	618.7	852.9	772.1	564.2	491.6	494.9
85°	123.7	130.3	216.1	245.8	250.8	432.2	668.2	597.2	433.9	364.6	367.9
87.5°	34.6	44.5	79.2	97.3	120.4	224.4	397.6	354.7	217.8	151.8	151.8
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)