

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: P884614

Luminaire Tested: **NAV-SB5C-735-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884614
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37670 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

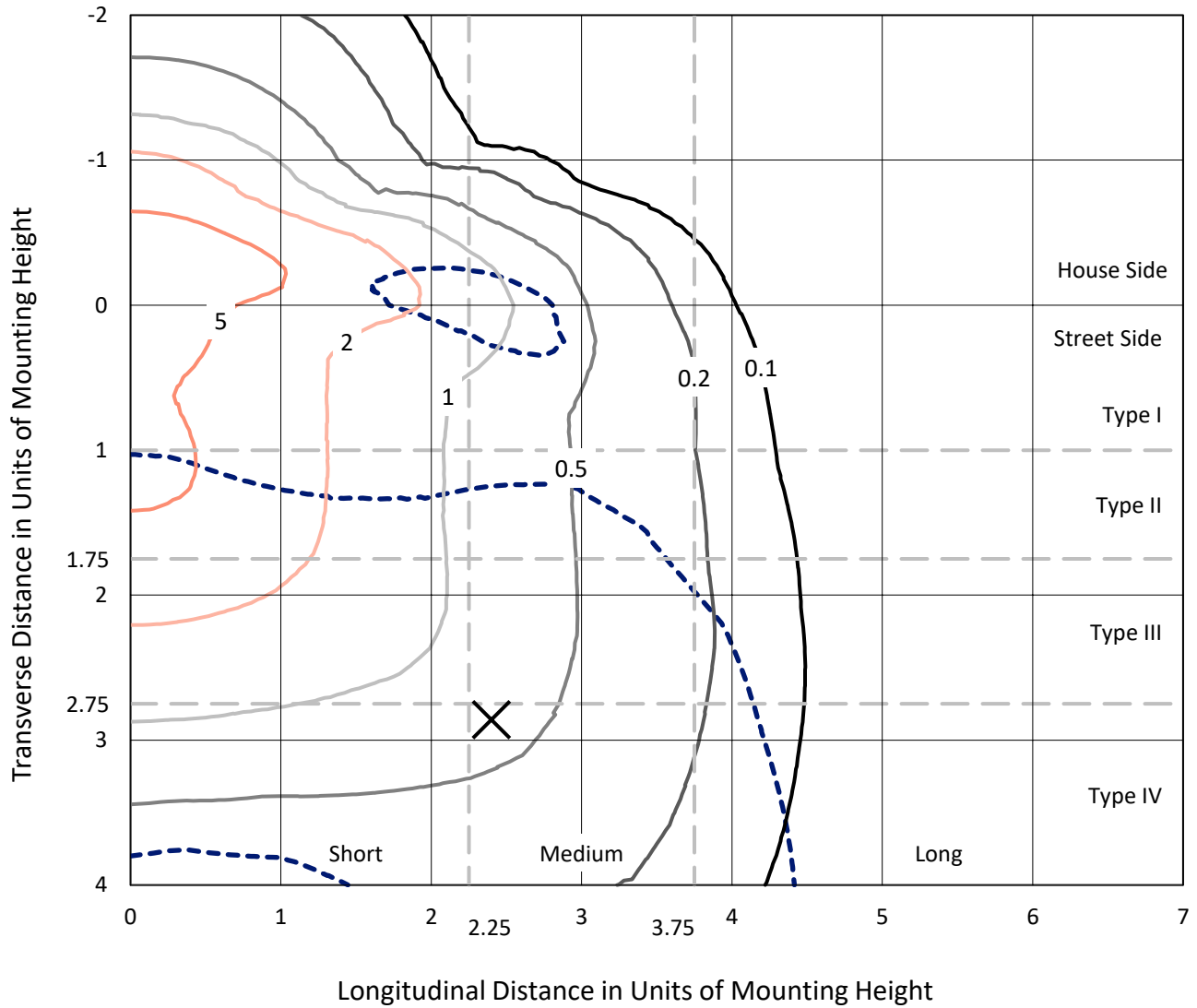
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

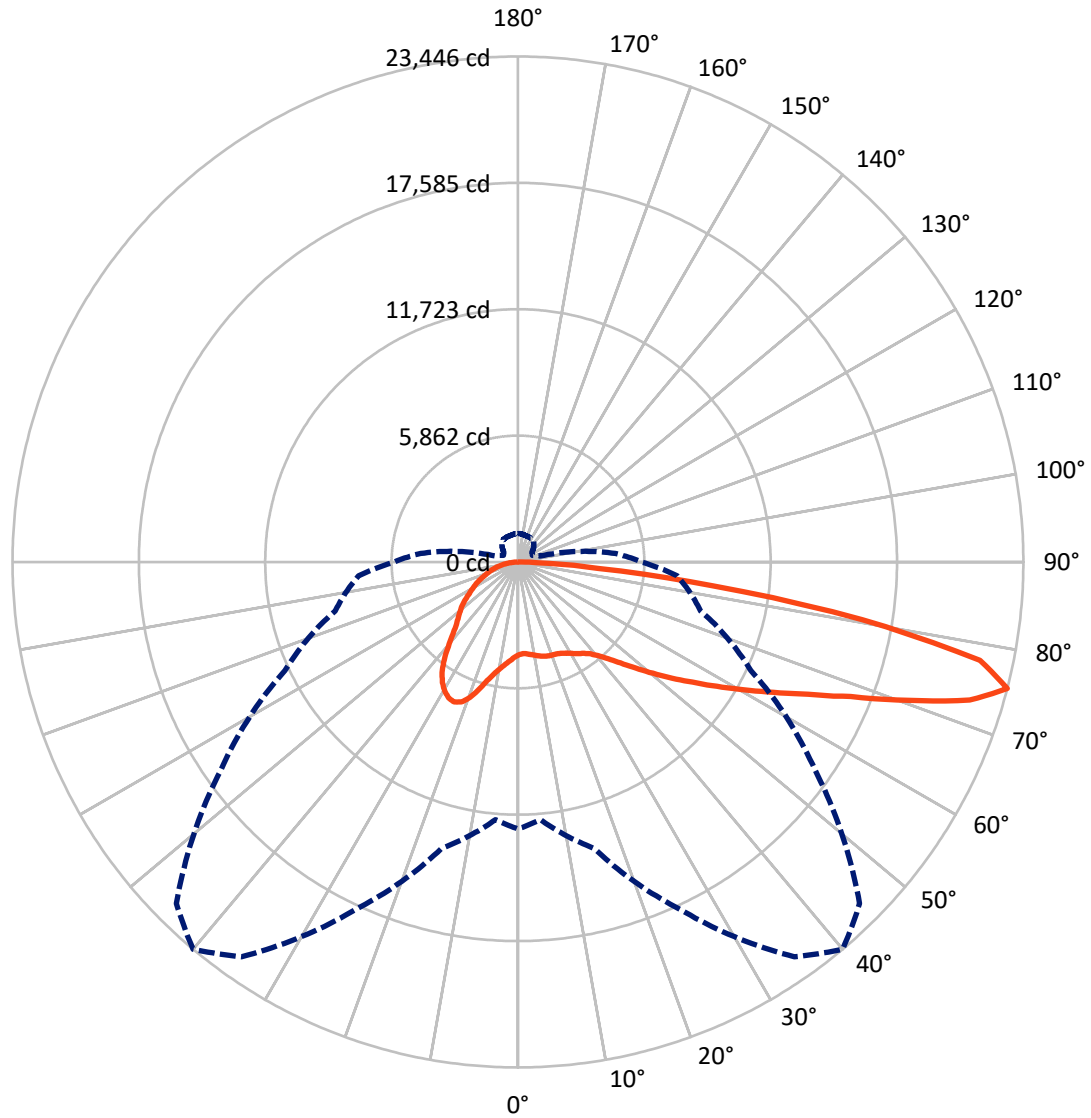
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11671.4	0.0	11671.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	25998.6	0.0	25998.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	37670.0	0.0	37670.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	430.0	1.1
10°-20°	1443.6	3.8
20°-30°	2636.0	7.0
30°-40°	3738.5	9.9
40°-50°	5048.2	13.4
50°-60°	6791.1	18.0
60°-70°	8619.5	22.9
70°-80°	7822.7	20.8
80°-90°	1140.3	3.0
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°	37670.0	100.0
0°-180°	37670.0	100.0

Coefficient of Utilization



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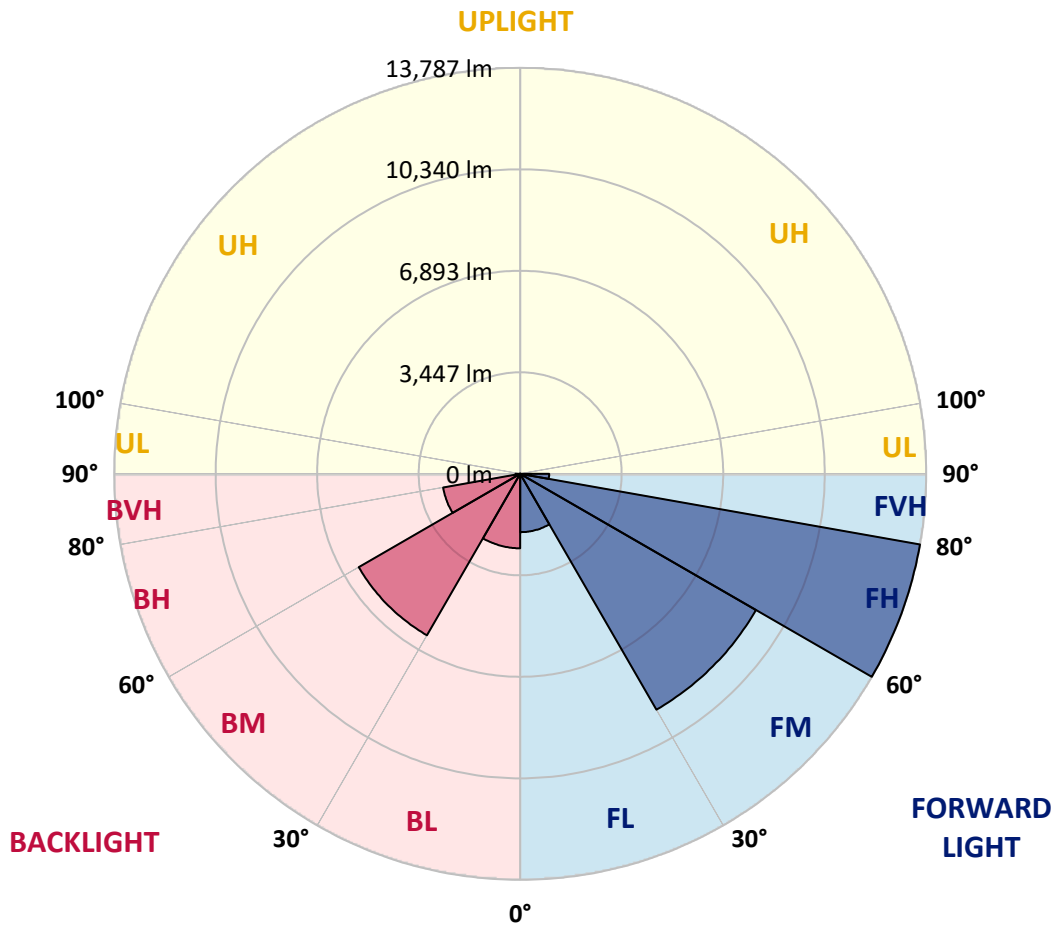
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1981.5	5.3			
FM (30°-60°)	9247.1	24.5			
FH (60°-80°)	13786.6	36.6			G5
FVH (80°-90°)	983.3	2.6			G5
BL (0°-30°)	2528.1	6.7	B4/5000		
BM (30°-60°)	6330.7	16.8	B4/8500		
BH (60°-80°)	2655.6	7.0	B4/5000		G4/5000
BVH (80°-90°)	157.0	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6
2.5°	4241.7	4265.7	4259.7	4251.7	4251.7	4253.7	4251.7	4265.7	4279.6	4293.6	4315.6
5°	4285.6	4309.6	4297.6	4287.6	4279.6	4277.6	4271.7	4269.7	4277.6	4295.6	4325.6
7.5°	4371.5	4395.5	4377.5	4359.6	4343.6	4335.6	4327.6	4315.6	4309.6	4319.6	4361.6
10°	4467.5	4491.4	4469.4	4437.5	4411.5	4401.5	4393.5	4381.5	4373.5	4379.5	4425.5
12.5°	4563.4	4587.3	4557.4	4513.4	4479.4	4473.4	4463.5	4459.5	4457.5	4455.5	4501.4
15°	4653.3	4673.2	4635.3	4583.3	4547.4	4537.4	4527.4	4533.4	4543.4	4555.4	4607.3
17.5°	4723.2	4743.2	4687.2	4619.3	4585.3	4581.3	4575.3	4595.3	4623.3	4653.3	4717.2
20°	4787.1	4807.1	4735.2	4643.3	4603.3	4603.3	4605.3	4647.3	4687.2	4731.2	4819.1
22.5°	4877.0	4893.0	4805.1	4679.2	4621.3	4625.3	4641.3	4683.2	4733.2	4793.1	4915.0
25°	5010.9	5022.9	4915.0	4747.2	4681.2	4693.2	4707.2	4727.2	4775.1	4845.1	5008.9
27.5°	5226.7	5236.7	5094.8	4867.0	4767.1	4787.1	4807.1	4793.1	4815.1	4875.0	5084.8
30°	5530.4	5536.4	5356.5	5054.9	4913.0	4923.0	4927.0	4869.0	4827.1	4875.0	5138.8
32.5°	5890.0	5888.0	5674.2	5282.6	5078.8	5068.8	5034.9	4921.0	4823.1	4865.0	5186.7
35°	6447.4	6425.5	6149.7	5602.3	5266.6	5204.7	5124.8	4978.9	4843.1	4855.1	5228.7
37.5°	7370.5	7302.6	6921.0	6125.8	5546.4	5388.5	5270.6	5072.8	4887.0	4851.1	5278.6
40°	8411.4	8325.5	7906.0	6843.0	5965.9	5712.2	5522.4	5206.7	4959.0	4869.0	5352.6
42.5°	9646.2	9524.3	9072.8	7688.2	6497.4	6129.8	5844.1	5376.5	5064.8	4927.0	5452.4
45°	11162.6	11000.8	10361.5	8641.2	7166.7	6677.2	6295.6	5634.3	5226.7	5038.9	5602.3
47.5°	12695.1	12735.0	11826.0	9732.1	7969.9	7352.5	6861.0	6021.9	5462.4	5218.7	5844.1
50°	14323.4	14351.4	13282.5	10940.9	8881.0	8115.7	7496.4	6455.4	5790.1	5474.4	6205.7
52.5°	15594.1	15598.1	14605.1	12205.6	9830.0	8954.9	8181.7	6950.9	6169.7	5814.1	6687.2
55°	16389.3	16379.3	15532.2	13402.4	10920.9	9836.0	8940.9	7514.4	6633.2	6213.7	7292.6
57.5°	16966.7	16936.8	16171.5	14431.3	12083.7	10876.9	9800.0	8153.7	7180.7	6689.2	8089.8
60°	17186.5	17168.5	16605.1	15320.4	13306.5	12027.8	10791.0	8869.0	7802.1	7250.6	9114.7
62.5°	17270.4	17304.4	17030.7	16181.5	14615.1	13302.5	11879.9	9724.1	8501.3	7886.0	10195.6
65°	17566.1	17628.1	17572.1	17308.4	16093.6	14794.9	13324.4	10741.1	9264.6	8567.3	11324.5
67.5°	18151.5	18213.5	18237.4	18657.0	17899.8	16655.0	15126.6	12007.8	10157.7	9274.6	12173.6
70°	18137.5	18119.6	18543.1	19729.9	20161.5	19230.4	17556.1	13566.2	11222.6	9862.0	12281.5
72.5°	16509.2	16365.3	17366.3	19717.9	22043.6	21919.7	20523.1	15576.1	12141.6	9933.9	10657.2
75°	12385.4	12001.8	13770.0	17769.9	22357.2	23446.1	22409.2	16822.9	11923.9	8777.1	7416.4
77.5°	5296.6	4911.0	6994.9	13154.6	20009.6	21917.7	20678.9	14677.1	9518.3	5804.1	3642.3
80°	1386.6	1384.6	2113.8	5963.9	13608.1	16185.5	14199.5	9478.4	5438.5	2073.9	1005.0
82.5°	573.4	559.4	777.2	2319.6	6649.2	9082.8	7412.5	4227.7	1964.0	561.4	333.7
85°	213.8	211.8	377.6	801.2	2345.6	3746.2	2711.2	1080.9	489.5	273.7	149.8
87.5°	59.9	57.9	81.9	277.7	571.4	867.1	463.5	177.8	137.9	107.9	44.0
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°	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6	4307.6
2.5°	4321.6	4331.6	4349.6	4363.6	4381.5	4401.5	4429.5	4447.5	4465.5	4477.4	4469.4
5°	4339.6	4361.6	4407.5	4453.5	4507.4	4557.4	4615.3	4657.3	4691.2	4701.2	4705.2
7.5°	4379.5	4415.5	4493.4	4571.3	4657.3	4739.2	4823.1	4895.0	4953.0	4974.9	4976.9
10°	4449.5	4497.4	4607.3	4717.2	4831.1	4957.0	5064.8	5168.7	5250.7	5284.6	5286.6
12.5°	4537.4	4597.3	4741.2	4893.0	5050.9	5224.7	5364.5	5492.4	5594.3	5640.3	5640.3
15°	4651.3	4729.2	4913.0	5116.8	5348.6	5590.3	5768.1	5910.0	6023.9	6079.8	6075.8
17.5°	4775.1	4879.0	5110.8	5418.5	5750.1	6067.8	6275.6	6379.5	6497.4	6551.3	6549.3
20°	4895.0	5022.9	5354.5	5802.1	6243.6	6581.3	6749.1	6777.1	6785.1	6791.1	6807.1
22.5°	5018.9	5190.7	5660.2	6285.6	6759.1	6992.9	7016.9	6897.0	6729.1	6651.2	6673.2
25°	5154.8	5382.5	6059.8	6819.1	7202.7	7230.6	7046.8	6755.1	6437.4	6291.6	6313.6
27.5°	5286.6	5604.3	6539.3	7328.5	7522.3	7276.6	6881.0	6467.4	6083.8	5930.0	5947.9
30°	5418.5	5858.0	7068.8	7774.1	7668.2	7162.7	6619.3	6157.7	5772.1	5610.3	5628.3
32.5°	5552.3	6153.7	7678.2	8095.8	7642.2	6921.0	6293.6	5810.1	5470.4	5300.6	5322.6
35°	5704.2	6517.4	8255.6	8271.6	7468.4	6565.3	5864.0	5394.5	5098.8	4962.9	4992.9
37.5°	5902.0	6978.9	8765.1	8315.5	7164.7	6043.8	5330.6	4903.0	4659.3	4597.3	4641.3
40°	6147.7	7534.3	9154.7	8245.6	6715.2	5410.5	4747.2	4405.5	4267.7	4281.6	4329.6
42.5°	6467.4	8155.7	9428.4	8065.8	6089.8	4757.2	4235.7	4083.8	4149.8	4205.7	4257.7
45°	6883.0	8801.0	9598.2	7760.1	5382.5	4203.7	3934.0	3970.0	4019.9	4025.9	4065.9
47.5°	7414.5	9454.4	9710.1	7298.6	4661.3	3814.1	3742.2	3750.2	3740.2	3698.2	3730.2
50°	8077.8	10089.7	9810.0	6687.2	4047.9	3570.4	3474.5	3446.5	3308.6	3172.8	3190.8
52.5°	8833.0	10673.1	9852.0	5928.0	3570.4	3366.6	3210.7	3034.9	2777.2	2735.2	2749.2
55°	9672.2	11212.6	9744.1	4994.9	3168.8	3104.8	2869.1	2657.3	2629.3	2593.4	2599.4
57.5°	10675.1	11794.0	9524.3	3954.0	2757.2	2799.2	2569.4	2593.4	2543.4	2487.5	2477.5
60°	11772.0	12395.4	9138.7	3004.9	2331.6	2417.5	2491.5	2489.5	2475.5	2429.5	2413.5
62.5°	12759.0	12791.0	8379.5	2301.7	1958.0	2121.8	2323.6	2321.6	2309.6	2283.7	2273.7
65°	13346.4	12731.0	7112.8	1812.2	1650.3	1878.1	2095.9	2111.9	2113.8	2111.9	2111.9
67.5°	13242.5	12029.8	5374.5	1442.5	1396.6	1630.3	1870.1	1892.1	1908.1	1912.1	1916.0
70°	12067.7	10489.3	3504.4	1150.8	1170.8	1412.6	1656.3	1678.3	1692.3	1708.3	1716.3
72.5°	9406.4	7712.1	2006.0	931.1	973.0	1224.8	1444.5	1470.5	1478.5	1508.5	1520.5
75°	5732.2	4535.4	1082.9	733.3	799.2	1046.9	1234.7	1264.7	1278.7	1314.7	1318.7
77.5°	2725.2	1964.0	617.4	571.4	643.3	855.1	1042.9	1076.9	1038.9	1058.9	1042.9
80°	921.1	729.3	389.6	435.6	491.5	667.3	835.1	869.1	789.2	785.2	777.2
82.5°	321.7	295.7	247.7	289.7	317.7	477.5	631.4	675.3	587.4	585.4	557.4
85°	125.9	119.9	137.9	157.8	189.8	293.7	415.6	437.6	361.6	291.7	287.7
87.5°	26.0	28.0	34.0	36.0	57.9	101.9	149.8	183.8	145.9	123.9	113.9
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)