

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: P884099

Luminaire Tested: **NAV-SB4D-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884099
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40623 lumens
Efficiency: N/A
Efficacy: 138.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

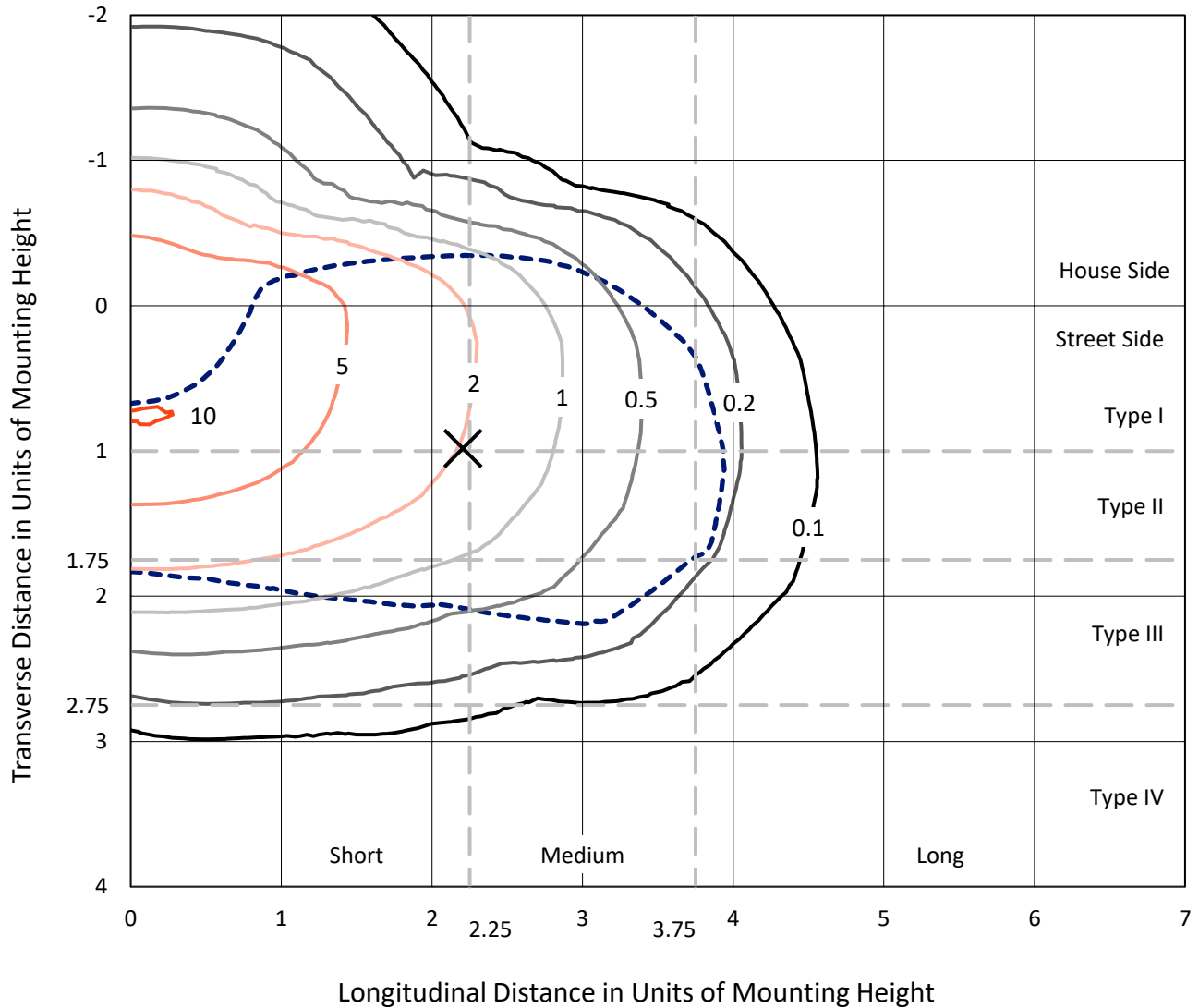
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884099
 CATALOG NUMBER: NAV-SB4D-730-U-T3

Iso-Footcandle Lines of Horizontal Illumination

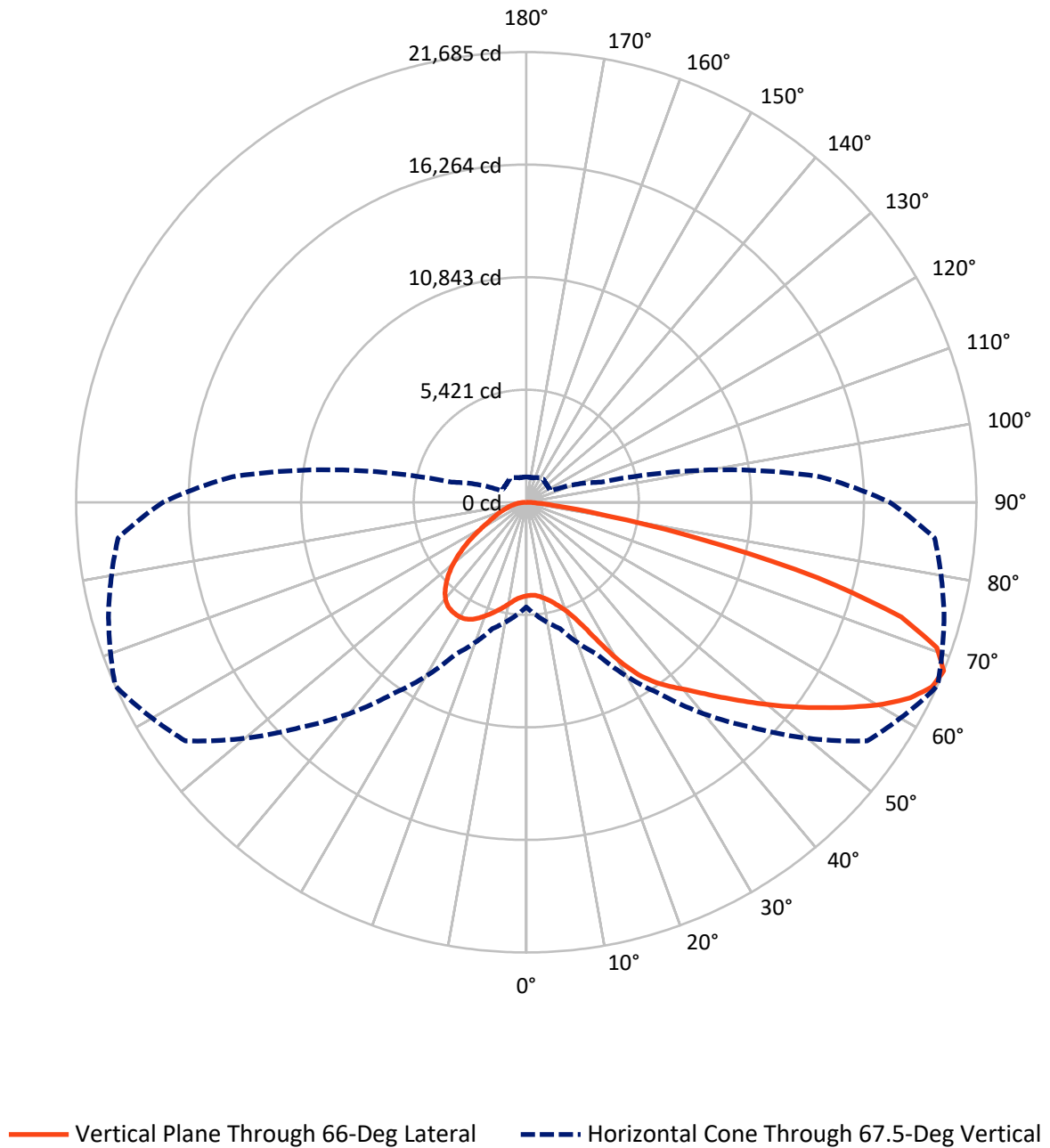
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc
 Type III - Short - N/A

REPORT NUMBER: P884099
CATALOG NUMBER: NAV-SB4D-730-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P884099
 CATALOG NUMBER: NAV-SB4D-730-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10100.8	0.0	10100.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	30522.2	0.0	30522.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	40623.0	0.0	40623.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.7	1.1
10°-20°	1475.9	3.6
20°-30°	2844.7	7.0
30°-40°	4987.8	12.3
40°-50°	7415.2	18.3
50°-60°	9399.5	23.1
60°-70°	9197.2	22.6
70°-80°	4387.1	10.8
80°-90°	468.9	1.2
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°	40623.0	100.0
0°-180°	40623.0	100.0

Coefficient of Utilization



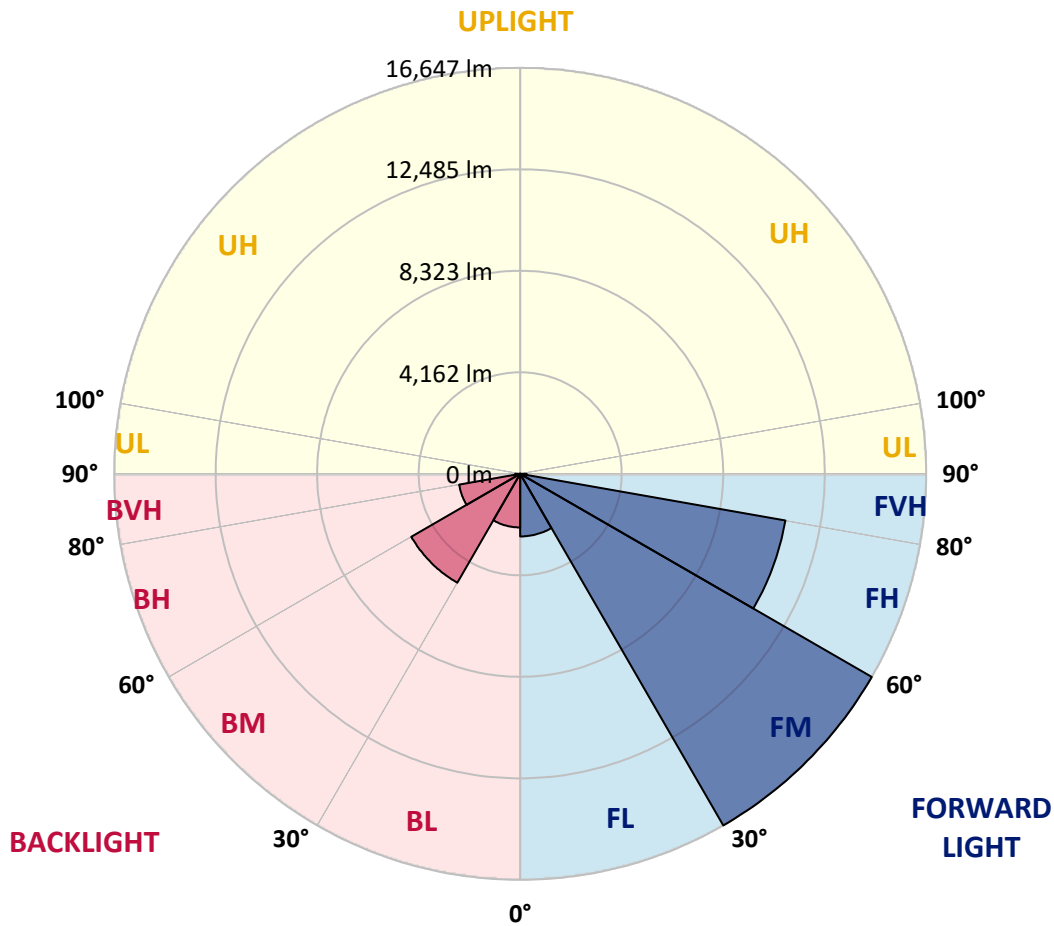
REPORT NUMBER: P884099
 CATALOG NUMBER: NAV-SB4D-730-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2567.0	6.3			
FM (30°-60°)	16647.0	41.0			
FH (60°-80°)	11042.4	27.2			G4/12000
FVH (80°-90°)	265.8	0.7			G3/500
BL (0°-30°)	2200.3	5.4	B3/2500		
BM (30°-60°)	5155.6	12.7	B4/8500		
BH (60°-80°)	2541.9	6.3	B4/5000		G4/5000
BVH (80°-90°)	203.0	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Short



REPORT NUMBER: P884099
 CATALOG NUMBER: NAV-SB4D-730-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6
2.5°	4458.7	4484.3	4477.9	4467.2	4465.1	4469.3	4475.7	4482.1	4480.0	4490.7	4507.8
5°	4445.9	4471.5	4469.3	4469.3	4477.9	4495.0	4505.6	4516.3	4505.6	4518.4	4541.9
7.5°	4454.4	4473.6	4482.1	4490.7	4512.0	4544.0	4569.7	4593.1	4580.3	4595.3	4625.2
10°	4563.3	4578.2	4586.7	4586.7	4601.7	4638.0	4663.6	4706.3	4695.6	4719.1	4757.5
12.5°	4761.8	4776.7	4776.7	4768.2	4778.8	4802.3	4810.8	4857.8	4838.6	4877.0	4915.4
15°	5005.1	5034.9	5011.5	4996.5	5000.8	5024.3	5022.1	5058.4	5039.2	5071.2	5105.4
17.5°	5274.0	5312.4	5274.0	5271.9	5263.3	5288.9	5291.1	5323.1	5288.9	5312.4	5335.9
20°	5592.0	5645.4	5613.4	5624.0	5604.8	5615.5	5626.2	5673.1	5619.8	5636.8	5630.4
22.5°	6040.2	6104.3	6070.1	6110.7	6097.9	6089.3	6087.2	6170.4	6087.2	6093.6	6031.7
25°	6693.3	6770.2	6710.4	6765.9	6765.9	6793.7	6825.7	6932.4	6793.7	6753.1	6593.0
27.5°	7658.1	7734.9	7617.5	7651.7	7641.0	7709.3	7675.1	7939.8	7790.4	7724.2	7401.9
30°	8819.2	8955.8	8733.8	8725.3	8714.6	8823.4	8872.5	9047.5	8896.0	8829.8	8441.4
32.5°	10074.2	10217.2	9952.5	9875.7	9835.1	9901.3	9860.7	10001.6	9897.0	9794.6	9314.3
35°	11401.7	11542.6	11290.7	11141.3	10979.1	10840.4	10695.3	10731.5	10633.4	10477.6	9980.3
37.5°	12656.7	12915.0	12648.2	12488.1	12189.3	11918.2	11512.7	11344.1	11252.3	11109.3	10607.8
40°	13935.2	14082.5	13879.7	13743.1	13418.7	12994.0	12345.1	11988.7	11864.9	11726.2	11301.4
42.5°	14876.5	15017.3	14908.5	14814.6	14560.6	14067.5	13228.7	12782.7	12603.4	12447.6	12086.9
45°	15623.5	15728.1	15659.8	15693.9	15585.1	15107.0	14144.4	13634.3	13448.6	13258.6	12974.8
47.5°	15924.4	16035.4	16144.3	16347.0	16532.7	16180.6	15128.3	14556.3	14360.0	14165.7	13886.1
50°	15890.3	16003.4	16319.3	16750.4	17326.7	17209.3	16165.6	15538.1	15356.7	15134.7	14876.5
52.5°	15617.1	15745.2	16150.7	16867.8	17785.6	17979.8	17222.1	16551.9	16381.2	16116.5	15858.3
55°	14899.9	14976.8	15585.1	16601.0	17894.4	18517.7	18257.3	17631.9	17461.2	17091.9	16810.2
57.5°	13570.2	13681.2	14567.0	15881.8	17621.3	18882.7	19166.5	18767.4	18603.1	18071.6	17777.1
60°	11835.0	12012.2	13026.0	14673.7	16925.5	18880.5	19992.5	19883.7	19747.1	19036.3	18729.0
62.5°	9871.4	10076.3	11051.7	12966.2	15708.9	18344.8	20509.0	20818.5	20748.1	19926.4	19533.6
65°	7581.2	7722.1	8693.2	10757.2	13815.7	17194.4	20568.8	21456.7	21469.5	20602.9	19954.1
67.5°	5047.8	5453.3	6296.4	8072.1	11280.1	15314.0	20043.7	21561.3	21685.1	20835.6	19742.8
70°	2463.0	2996.6	3822.6	5246.2	8072.1	12430.5	18671.4	20703.3	20978.6	20156.9	18483.5
72.5°	1022.4	1195.2	1645.6	2589.0	4633.7	8388.0	15913.8	18376.8	18886.9	17860.3	15540.3
75°	689.4	747.0	941.3	1327.6	2110.9	4136.4	11476.4	13702.6	14524.3	13489.1	11026.1
77.5°	531.5	567.7	685.1	928.4	1255.0	1564.5	6142.7	8257.8	8682.6	8038.0	5737.2
80°	418.3	446.1	512.2	676.6	890.0	836.7	2093.8	3741.5	3987.0	3344.5	1844.1
82.5°	362.8	373.5	367.1	458.9	591.2	488.8	687.3	1380.9	1523.9	1105.6	601.9
85°	262.5	292.4	305.2	283.9	313.8	247.6	281.7	488.8	537.9	480.2	339.4
87.5°	106.7	157.9	194.2	183.6	115.3	70.4	87.5	143.0	164.3	179.3	111.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884099
 CATALOG NUMBER: NAV-SB4D-730-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6	4505.6
2.5°	4509.9	4524.8	4535.5	4548.3	4556.9	4569.7	4595.3	4610.2	4612.3	4623.0	4620.9
5°	4550.4	4571.8	4595.3	4629.4	4667.8	4699.9	4748.9	4783.1	4795.9	4806.6	4804.4
7.5°	4638.0	4667.8	4710.5	4770.3	4825.8	4868.5	4928.2	4968.8	5009.3	5024.3	5026.4
10°	4768.2	4810.8	4872.7	4953.8	5013.6	5069.1	5131.0	5165.1	5205.7	5222.8	5231.3
12.5°	4930.4	4975.2	5056.3	5169.4	5224.9	5263.3	5284.7	5276.1	5284.7	5299.6	5303.9
15°	5116.1	5165.1	5256.9	5378.6	5417.0	5382.8	5335.9	5293.2	5286.8	5291.1	5306.0
17.5°	5335.9	5372.2	5478.9	5581.3	5553.6	5412.7	5310.3	5242.0	5207.8	5197.2	5212.1
20°	5643.2	5643.2	5730.7	5794.8	5609.1	5370.0	5210.0	5099.0	5028.5	4998.7	4992.3
22.5°	6016.8	5982.6	6038.1	5993.3	5598.4	5250.5	5028.5	4836.5	4729.7	4687.0	4680.6
25°	6490.6	6450.0	6435.1	6157.6	5521.6	5060.6	4699.9	4467.2	4373.3	4349.8	4354.1
27.5°	7205.6	7103.1	6908.9	6247.3	5380.7	4761.8	4315.7	4100.1	4046.7	4048.9	4055.3
30°	8157.5	7952.6	7476.7	6262.2	5150.2	4339.1	3922.9	3769.3	3743.7	3754.3	3790.6
32.5°	9039.0	8844.8	8057.2	6193.9	4795.9	3925.1	3570.8	3468.3	3429.9	3442.7	3459.8
35°	9730.5	9677.2	8595.1	6097.9	4360.5	3536.6	3254.9	3167.4	3092.7	3075.6	3088.4
37.5°	10383.6	10362.3	8998.4	5963.4	3929.4	3261.3	3000.9	2885.7	2776.8	2717.0	2719.2
40°	11100.8	11079.4	9263.1	5756.4	3547.3	3022.2	2772.5	2621.0	2486.5	2377.7	2388.3
42.5°	11907.6	11781.7	9389.0	5459.7	3222.9	2819.5	2586.8	2381.9	2204.8	2104.5	2110.9
45°	12789.1	12505.2	9386.9	5081.9	2949.7	2633.8	2388.3	2098.1	1933.7	1839.8	1835.5
47.5°	13723.9	13196.7	9271.6	4663.6	2685.0	2428.9	2081.0	1859.0	1750.2	1692.5	1679.7
50°	14688.6	13843.4	9075.3	4183.3	2414.0	2196.3	1888.9	1737.4	1654.1	1600.8	1581.6
52.5°	15595.7	14430.4	8838.4	3639.1	2138.6	1970.0	1803.5	1686.1	1598.6	1538.9	1513.3
55°	16438.8	14936.2	8503.3	3082.0	1914.5	1818.5	1763.0	1664.8	1564.5	1494.0	1466.3
57.5°	17188.0	15264.9	7924.9	2559.1	1754.4	1713.9	1720.3	1628.5	1513.3	1453.5	1415.1
60°	17811.2	15506.1	7069.0	2074.6	1624.2	1611.4	1654.1	1560.2	1425.8	1357.5	1327.6
62.5°	18184.7	15501.8	6018.9	1698.9	1513.3	1517.5	1566.6	1474.8	1338.2	1274.2	1255.0
65°	18152.7	15121.9	4866.3	1453.5	1406.5	1410.8	1474.8	1380.9	1265.7	1227.3	1225.1
67.5°	17510.3	14195.6	3733.0	1293.4	1289.2	1308.4	1383.1	1316.9	1220.9	1216.6	1223.0
70°	15770.8	12272.6	2689.3	1165.4	1167.5	1195.2	1293.4	1276.3	1197.4	1205.9	1203.8
72.5°	12646.1	9357.0	1805.7	1030.9	1033.0	1077.9	1208.0	1244.3	1173.9	1287.0	1304.1
75°	8422.2	5835.3	1161.1	887.9	890.0	947.7	1133.3	1182.4	1109.9	1282.7	1293.4
77.5°	4046.7	2623.1	840.9	747.0	747.0	800.4	979.7	1058.6	945.5	996.7	913.5
80°	1398.0	986.1	661.7	601.9	589.1	625.4	826.0	917.8	815.3	751.3	704.3
82.5°	550.7	512.2	531.5	467.4	424.7	448.2	642.4	757.7	599.8	542.1	540.0
85°	315.9	333.0	375.6	309.5	245.5	275.3	471.7	544.3	452.5	399.1	407.7
87.5°	85.4	117.4	172.9	160.1	111.0	117.4	224.1	300.9	260.4	200.6	207.0
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)