

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: P969228

Luminaire Tested: **NAV-SB5D-722-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-722-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43019.3 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

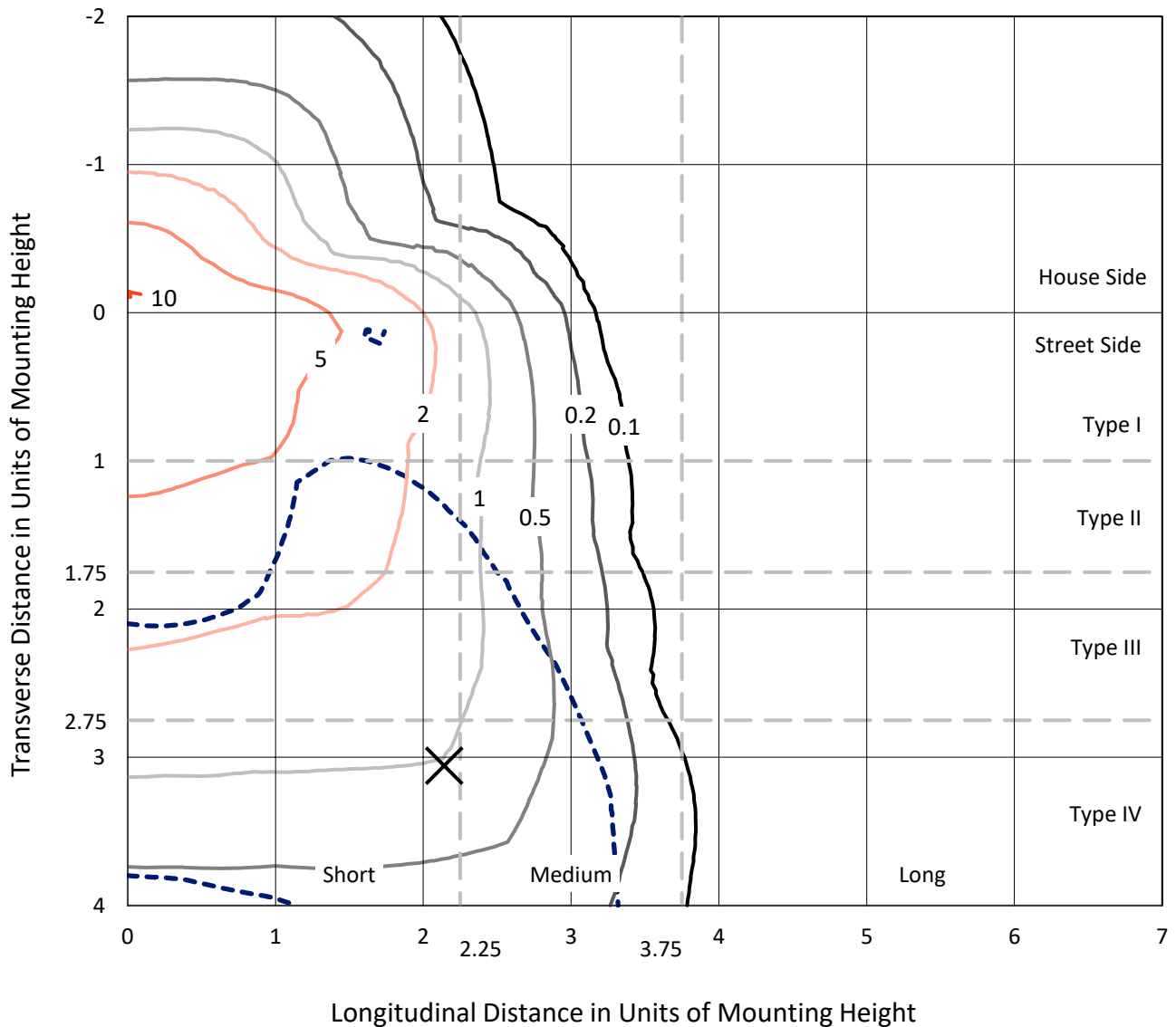
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

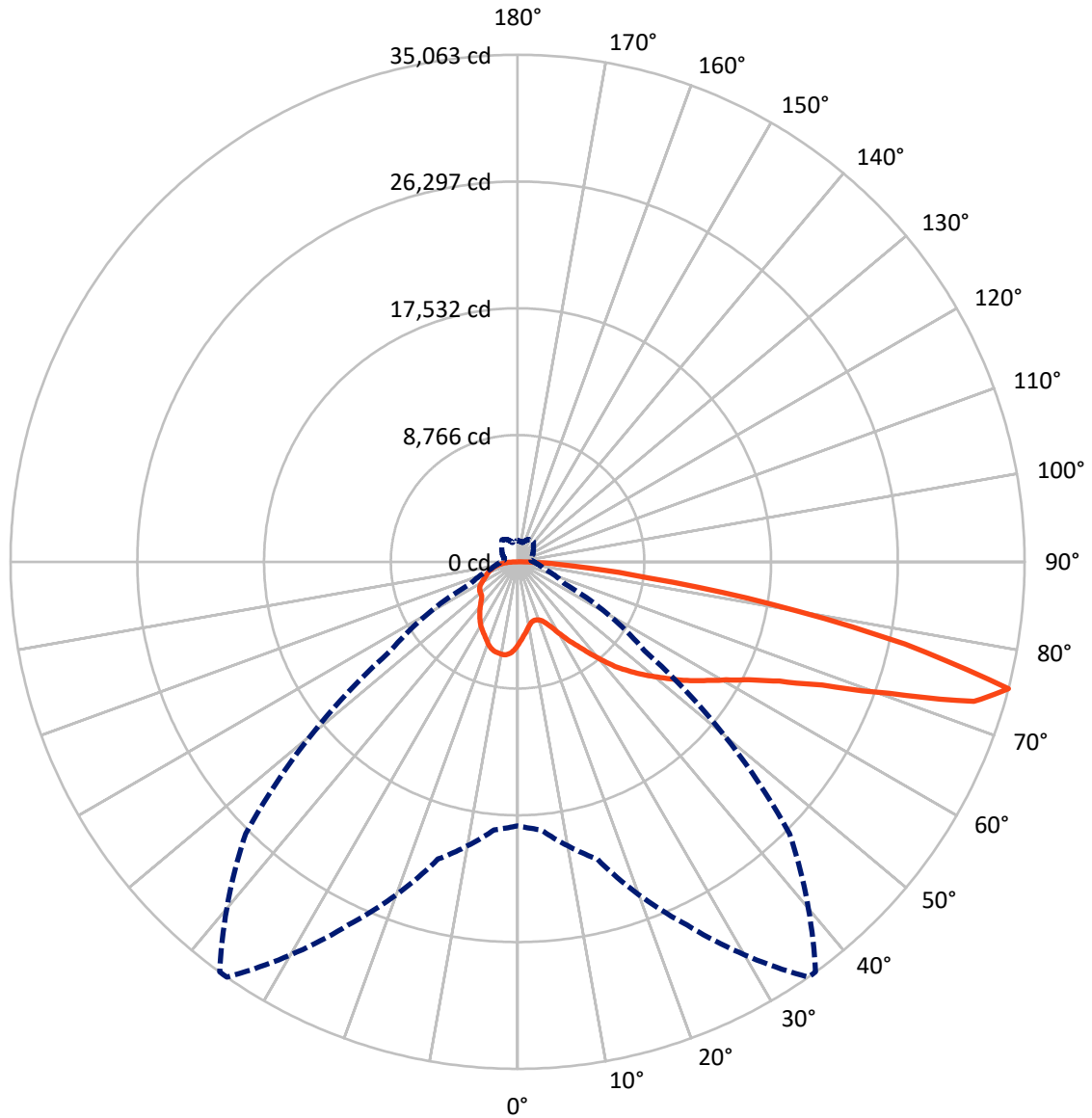
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 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	10237.5	0.0	10237.5
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	32781.8	0.0	32781.8
	% Fixture	76.2	0.0	76.2
Total	Lumens	43019.3	0.0	43019.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	542.8	1.3
10°-20°	1565.6	3.6
20°-30°	2629.0	6.1
30°-40°	4085.8	9.5
40°-50°	6064.4	14.1
50°-60°	8372.3	19.5
60°-70°	10157.5	23.6
70°-80°	8394.4	19.5
80°-90°	1207.4	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°	43019.3	100.0
0°-180°	43019.3	100.0

Coefficient of Utilization

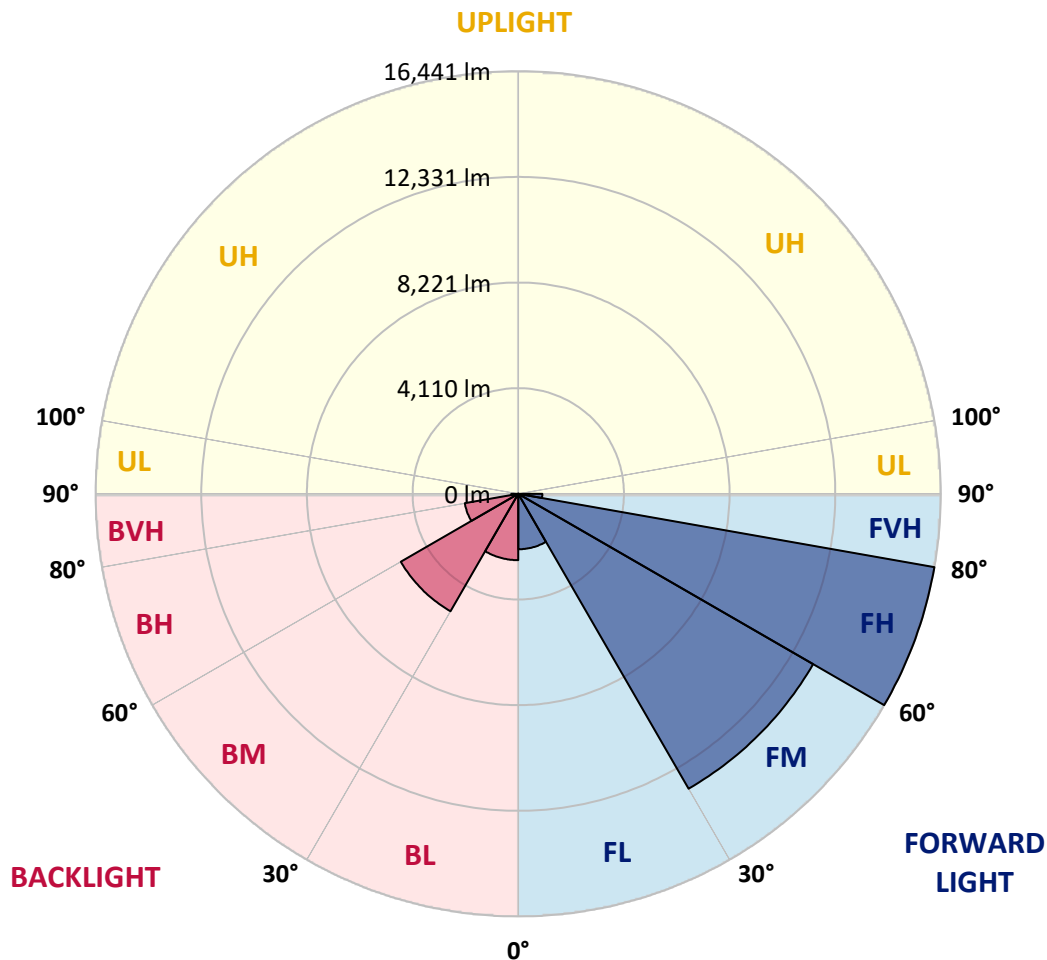


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2157.3	5.0			
FM (30°-60°)	13247.6	30.8			
FH (60°-80°)	16441.3	38.2			G5
FVH (80°-90°)	935.5	2.2			G5
BL (0°-30°)	2580.0	6.0	B4/5000		
BM (30°-60°)	5275.0	12.3	B4/8500		
BH (60°-80°)	2110.7	4.9	B3/2500		G3/2500
BVH (80°-90°)	271.9	0.6			G3/500
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6
2.5°	5286.1	5318.6	5332.6	5325.6	5360.5	5355.8	5404.7	5465.2	5548.8	5630.3	5748.9
5°	4879.1	4914.0	4944.2	4972.2	5039.6	5060.5	5137.3	5253.5	5407.0	5562.9	5758.1
7.5°	4500.1	4530.3	4576.8	4628.0	4741.9	4762.9	4890.8	5072.1	5286.1	5514.0	5783.8
10°	4190.7	4221.0	4269.8	4328.0	4469.8	4495.3	4658.2	4900.0	5179.1	5467.5	5811.6
12.5°	4058.2	4067.5	4095.4	4153.5	4276.8	4293.1	4472.2	4748.9	5074.5	5432.6	5853.6
15°	4051.2	4069.8	4072.1	4102.4	4204.7	4211.6	4376.8	4651.2	5009.4	5425.6	5916.3
17.5°	4121.0	4135.0	4113.9	4132.6	4218.6	4230.3	4360.5	4604.7	4988.4	5455.9	6023.3
20°	4307.0	4318.6	4255.8	4230.3	4293.1	4302.3	4430.3	4634.9	5009.4	5518.6	6169.8
22.5°	4702.4	4709.4	4555.8	4451.2	4455.9	4460.5	4572.1	4758.2	5090.8	5632.6	6355.8
25°	5318.6	5314.0	5069.9	4867.5	4751.2	4725.7	4800.1	4958.1	5227.9	5783.8	6595.4
27.5°	6039.6	6004.7	5760.5	5458.2	5204.7	5167.4	5151.2	5218.7	5423.3	5983.7	6888.4
30°	6853.6	6821.0	6558.2	6162.8	5811.6	5751.2	5597.7	5562.9	5714.0	6255.9	7295.4
32.5°	7746.5	7725.6	7411.7	6932.6	6462.8	6393.0	6134.9	6041.9	6160.6	6667.5	7862.9
35°	8495.4	8476.9	8216.3	7723.3	7148.9	7062.9	6800.1	6695.4	6755.9	7195.4	8604.8
37.5°	9172.2	9162.9	8939.6	8551.3	7958.2	7853.6	7558.2	7523.3	7511.7	7890.8	9504.7
40°	9800.1	9776.9	9544.3	9339.6	8900.1	8804.8	8544.3	8514.1	8425.6	8746.6	10523.4
42.5°	10495.5	10435.0	10097.8	10002.4	9883.8	9804.7	9648.9	9653.6	9458.2	9711.7	11602.4
45°	11062.9	11028.0	10681.5	10625.7	10753.6	10721.0	10855.9	10890.8	10511.7	10723.3	12723.3
47.5°	11672.2	11639.6	11346.6	11307.1	11653.6	11662.9	12139.6	12151.3	11539.7	11774.5	13846.6
50°	12423.4	12376.9	12086.2	12135.0	12523.3	12558.2	13430.4	13351.2	12486.1	12841.9	14960.6
52.5°	12918.7	12946.6	12883.8	12962.9	13493.1	13525.7	14700.1	14497.8	13423.4	13895.5	16053.7
55°	13283.8	13339.7	13535.0	13716.3	14516.4	14549.0	15897.9	15588.5	14200.1	14872.2	17081.5
57.5°	13753.6	13674.5	14039.6	14393.2	15488.5	15574.6	17063.0	16639.6	14888.5	15714.1	17786.2
60°	14428.0	14372.2	14656.0	15179.2	16576.9	16714.1	18295.5	17586.2	15393.1	16381.6	17923.4
62.5°	15795.5	15656.0	15700.1	16162.9	17949.0	18130.4	19686.3	18411.8	15644.3	16642.0	17188.5
65°	17839.7	17600.2	17376.9	17697.9	19881.5	20060.6	21256.0	19060.6	15551.3	16137.4	15237.3
67.5°	20414.1	20176.9	19902.5	20204.8	22728.1	22870.0	23193.2	19425.7	14818.7	14193.2	11788.4
70°	22537.4	22449.0	22776.9	24021.1	27274.6	27279.2	25677.0	19123.4	12811.8	10062.8	6821.0
72.5°	22256.0	22202.5	23930.5	27777.0	33004.9	32881.7	28028.1	16835.0	8630.3	4539.6	2555.8
75°	18258.3	18604.8	21281.6	27709.5	35063.1	35046.8	26588.6	10702.4	3569.8	1881.4	1320.9
77.5°	9790.8	10339.6	13816.4	20458.3	27372.3	27784.0	18693.1	3744.2	1532.6	1204.7	914.0
80°	3193.1	3672.2	5507.0	10416.4	17786.2	17709.4	8011.7	1469.7	1048.9	853.5	632.5
82.5°	1355.9	1411.6	2460.5	4918.7	9127.9	8986.1	2551.2	844.2	737.2	583.7	390.7
85°	530.2	593.1	1086.1	2274.5	3953.5	3867.4	921.0	418.6	472.1	381.4	232.6
87.5°	174.5	211.7	388.4	779.1	1230.2	1186.0	225.6	144.2	204.7	174.5	83.7
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°	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6	5732.6
2.5°	5781.4	5818.6	5862.8	5928.0	5983.7	6030.3	6079.1	6109.3	6121.0	6155.8	6153.6
5°	5823.3	5904.7	6014.0	6121.0	6225.6	6288.4	6344.2	6372.1	6397.7	6416.3	6421.0
7.5°	5893.0	5997.7	6169.8	6309.4	6397.7	6448.9	6486.1	6476.8	6486.1	6490.7	6497.7
10°	5953.5	6100.1	6304.7	6437.3	6504.8	6507.0	6497.7	6465.2	6448.9	6451.2	6455.9
12.5°	6025.7	6188.4	6409.3	6520.9	6539.6	6488.5	6448.9	6393.0	6372.1	6362.9	6358.2
15°	6123.3	6309.4	6523.3	6565.1	6518.7	6453.5	6386.1	6295.4	6248.9	6211.7	6223.3
17.5°	6241.9	6446.5	6611.7	6581.4	6481.5	6374.5	6265.2	6128.0	6032.6	5993.1	5995.4
20°	6407.1	6590.7	6679.1	6546.6	6395.4	6232.6	6046.6	5879.1	5790.7	5751.2	5746.6
22.5°	6607.0	6783.8	6744.2	6486.1	6272.2	6011.7	5779.2	5655.8	5611.7	5583.8	5588.4
25°	6846.6	6997.8	6790.7	6397.7	6069.8	5718.7	5539.6	5500.0	5479.1	5458.2	5458.2
27.5°	7158.2	7239.6	6825.7	6267.5	5753.5	5407.0	5341.9	5348.9	5341.9	5307.0	5314.0
30°	7569.8	7553.5	6858.2	6055.9	5390.8	5125.6	5130.2	5160.5	5165.2	5141.9	5153.5
32.5°	8111.6	7946.6	6874.5	5781.4	5044.2	4879.1	4883.7	4916.3	4939.6	4900.0	4918.7
35°	8767.5	8404.7	6848.8	5437.2	4776.8	4644.3	4609.3	4618.6	4625.6	4588.4	4614.0
37.5°	9532.6	8918.7	6735.0	5055.8	4555.8	4414.0	4339.5	4276.8	4239.6	4204.7	4227.9
40°	10372.2	9479.2	6525.7	4683.7	4309.3	4169.8	4058.2	3939.6	3814.0	3767.5	3788.4
42.5°	11251.2	10055.9	6272.2	4328.0	4025.6	3911.7	3793.0	3620.9	3432.6	3337.2	3348.9
45°	12162.9	10646.6	6023.3	3976.8	3734.9	3686.1	3548.9	3341.9	3137.2	3016.3	3007.0
47.5°	13055.9	11204.8	5658.2	3623.3	3462.9	3516.3	3409.4	3218.6	2990.7	2800.0	2779.1
50°	13909.5	11728.0	5060.5	3265.1	3241.9	3465.1	3362.8	3088.4	2828.0	2583.7	2562.8
52.5°	14755.9	12151.3	4295.4	2939.6	3123.3	3451.2	3302.3	3000.1	2681.4	2425.6	2397.7
55°	15474.5	12369.9	3558.2	2660.5	2951.2	3332.6	3230.3	2895.4	2474.5	2202.3	2179.0
57.5°	15883.8	12193.1	2944.2	2386.1	2714.0	3137.2	3107.0	2672.1	2227.9	2018.6	1990.8
60°	15707.1	11476.8	2441.9	2146.6	2488.4	2925.6	2893.1	2451.2	2039.5	1841.9	1813.9
62.5°	14732.6	10111.7	2044.2	1937.2	2283.7	2709.3	2679.0	2281.4	1895.3	1704.7	1674.4
65°	12769.9	8225.6	1734.9	1762.8	2076.8	2448.8	2493.0	2139.6	1781.4	1595.4	1565.2
67.5°	9739.7	5958.2	1493.0	1611.6	1874.4	2193.1	2320.9	2037.2	1686.0	1509.3	1481.4
70°	5551.2	3383.7	1288.4	1465.1	1695.4	1955.8	2188.4	1955.8	1583.7	1437.3	1418.6
72.5°	2104.6	1553.5	1114.0	1318.7	1523.3	1755.8	2041.9	1827.9	1465.1	1355.9	1337.2
75°	1123.3	946.5	937.3	1146.6	1325.6	1560.5	1858.1	1702.3	1376.8	1432.5	1479.1
77.5°	765.2	669.7	783.7	981.4	1109.4	1344.2	1662.8	1511.7	1193.0	1188.4	1095.3
80°	530.2	474.5	637.2	790.7	858.1	1130.3	1451.2	1297.6	972.1	907.0	867.5
82.5°	318.6	309.3	476.7	590.7	607.0	872.1	1202.3	1088.3	795.4	693.0	697.7
85°	174.5	183.7	304.6	346.6	353.5	609.3	941.9	841.8	611.6	513.9	518.6
87.5°	48.8	62.8	111.6	137.2	169.7	316.3	560.5	500.0	307.0	213.9	213.9
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)