

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: P884841

Luminaire Tested: **NAV-SB5D-830-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884841
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-SB5D-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 900mA 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: 44657 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

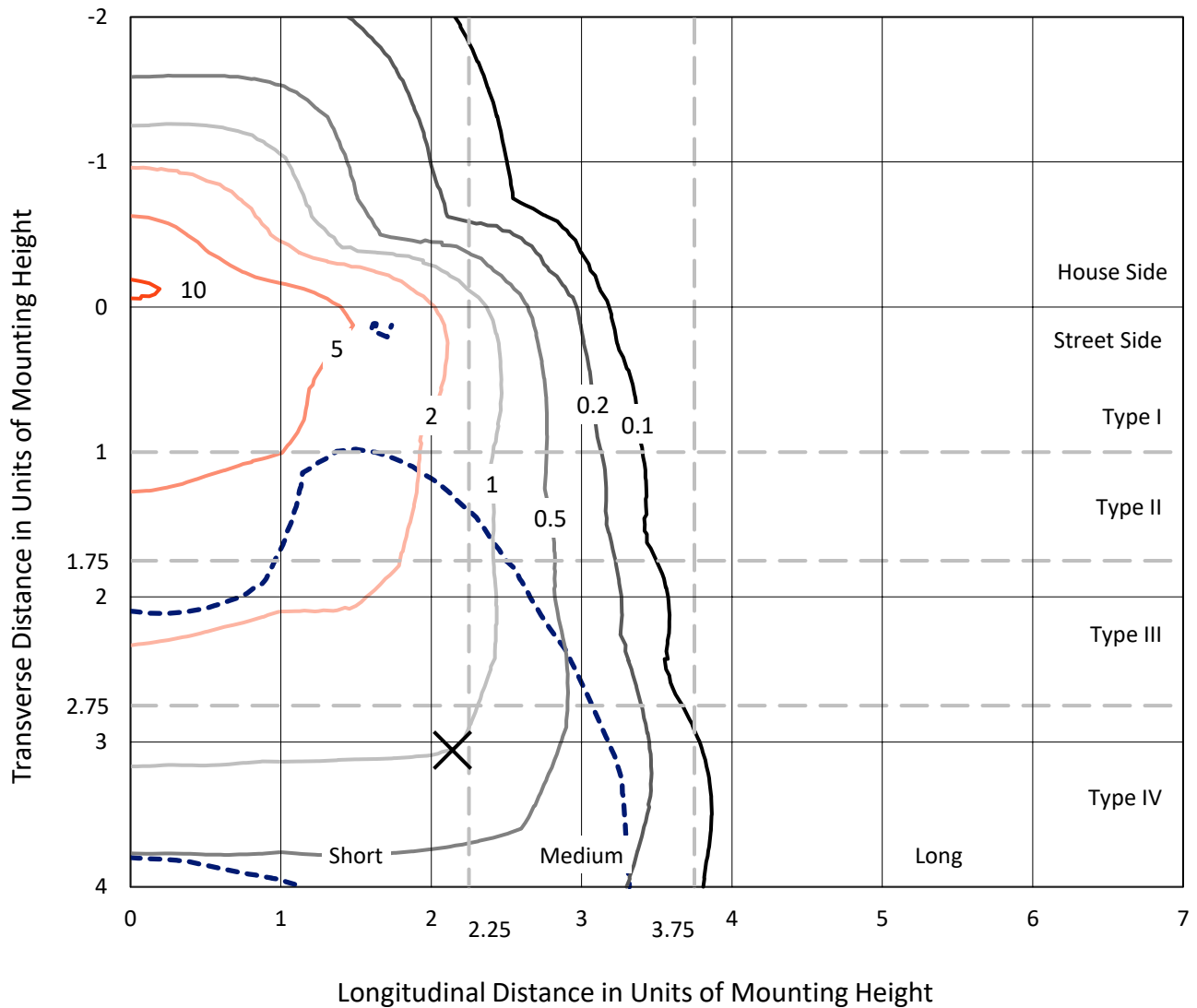
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884841
 CATALOG NUMBER: NAV-SB5D-830-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

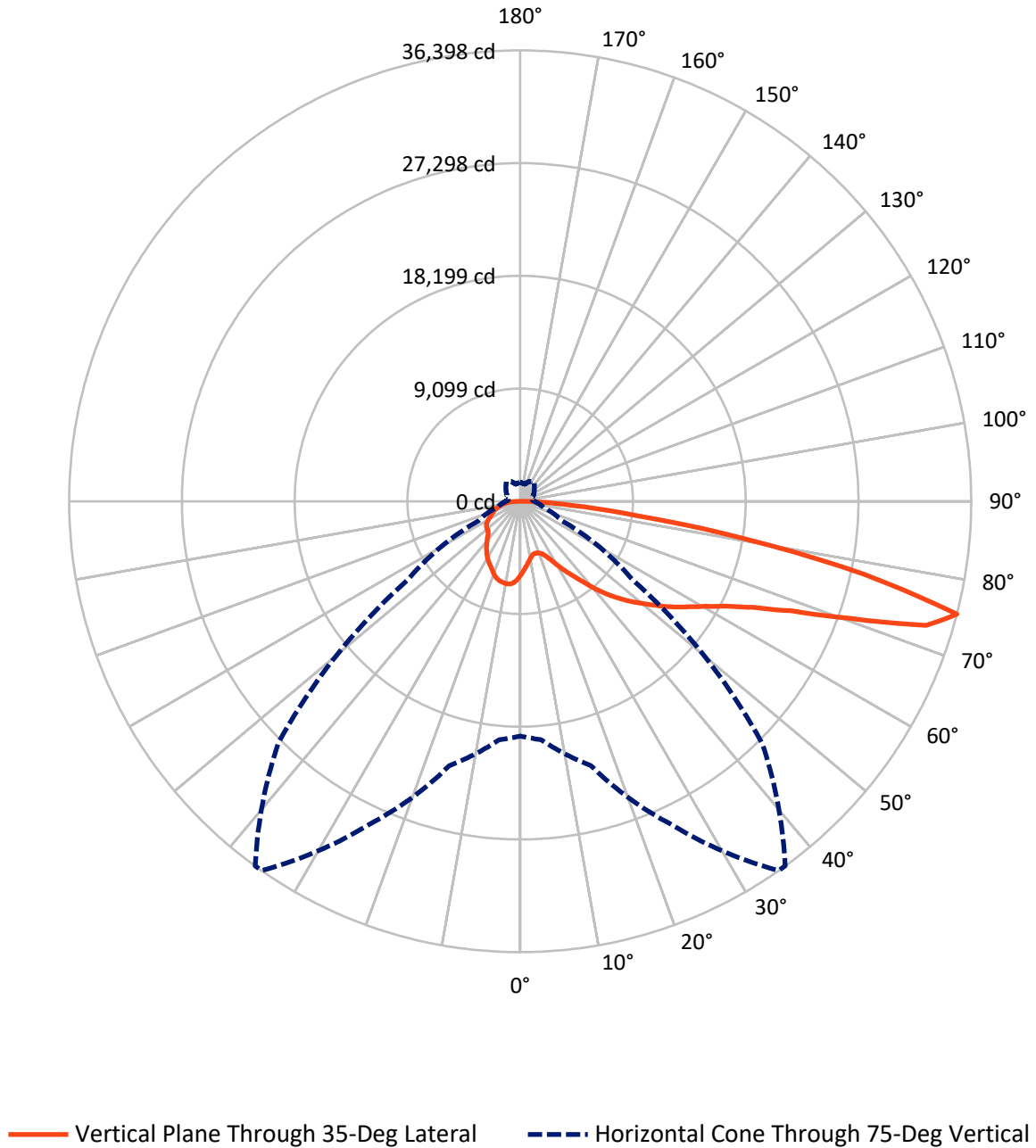
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P884841
CATALOG NUMBER: NAV-SB5D-830-U-T4FT

Luminous Intensity Polar Plot



REPORT NUMBER: P884841

CATALOG NUMBER: NAV-SB5D-830-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10627.2	0.0	10627.2
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	34029.8	0.0	34029.8
	% Fixture	76.2	0.0	76.2
Total	Lumens	44657.0	0.0	44657.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	563.4	1.3
10°-20°	1625.2	3.6
20°-30°	2729.1	6.1
30°-40°	4241.4	9.5
40°-50°	6295.3	14.1
50°-60°	8691.1	19.5
60°-70°	10544.2	23.6
70°-80°	8714.0	19.5
80°-90°	1253.3	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°	44657.0	100.0
0°-180°	44657.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884841

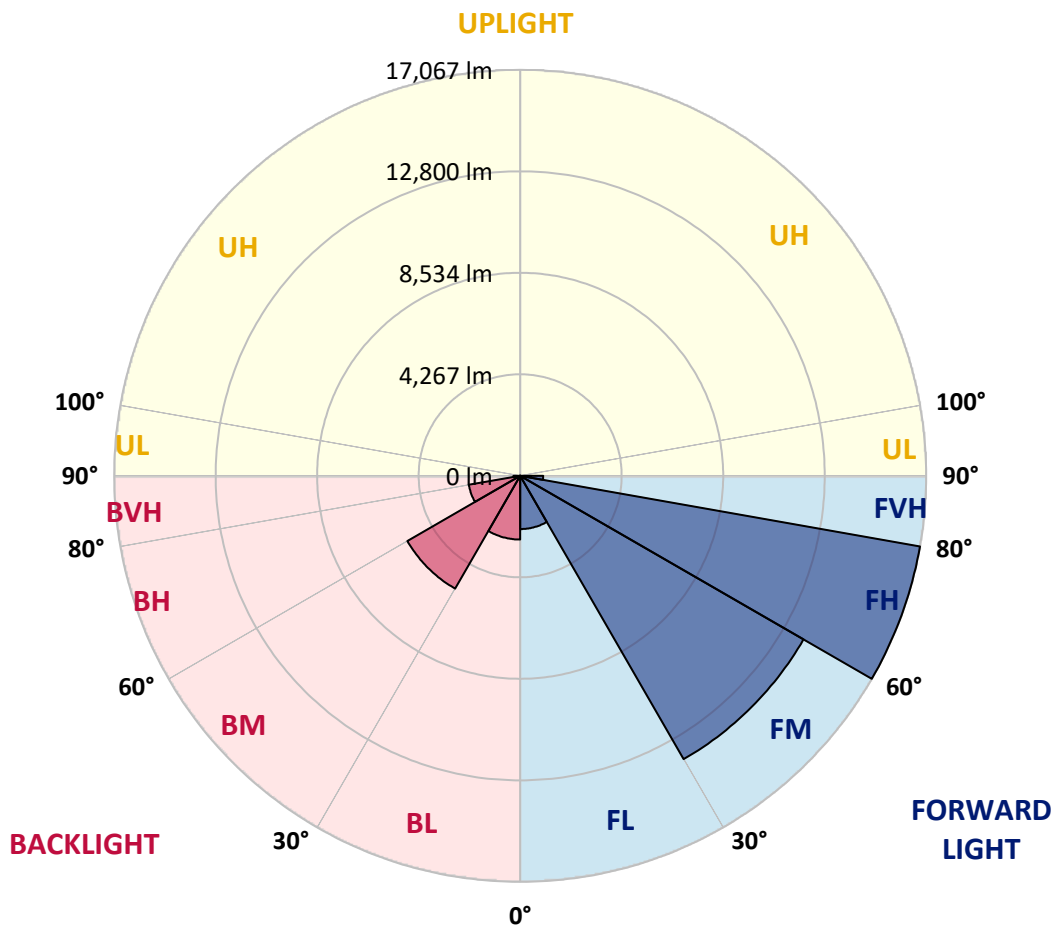
CATALOG NUMBER: NAV-SB5D-830-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2239.5	5.0			
FM (30°-60°)	13751.9	30.8			
FH (60°-80°)	17067.2	38.2			G5
FVH (80°-90°)	971.1	2.2			G5
BL (0°-30°)	2678.2	6.0	B4/5000		
BM (30°-60°)	5475.8	12.3	B4/8500		
BH (60°-80°)	2191.0	4.9	B3/2500		G3/2500
BVH (80°-90°)	282.2	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



REPORT NUMBER: P884841

CATALOG NUMBER: NAV-SB5D-830-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8
2.5°	5487.3	5521.1	5535.6	5528.4	5564.6	5559.8	5610.5	5673.2	5760.1	5844.6	5967.7
5°	5064.9	5101.1	5132.5	5161.4	5231.4	5253.2	5332.8	5453.5	5612.9	5774.6	5977.4
7.5°	4671.4	4702.7	4751.0	4804.1	4922.4	4944.2	5076.9	5265.2	5487.3	5723.9	6004.0
10°	4350.3	4381.7	4432.4	4492.7	4640.0	4666.5	4835.5	5086.6	5376.3	5675.6	6032.9
12.5°	4212.7	4222.3	4251.3	4311.6	4439.6	4456.5	4642.4	4929.7	5267.6	5639.4	6076.4
15°	4205.4	4224.7	4227.2	4258.5	4364.8	4372.0	4543.4	4828.3	5200.1	5632.2	6141.6
17.5°	4277.9	4292.3	4270.6	4289.9	4379.2	4391.3	4526.5	4780.0	5178.3	5663.6	6252.6
20°	4471.0	4483.1	4417.9	4391.3	4456.5	4466.2	4598.9	4811.4	5200.1	5728.7	6404.7
22.5°	4881.4	4888.6	4729.3	4620.7	4625.5	4630.3	4746.2	4939.3	5284.5	5847.0	6597.8
25°	5521.1	5516.3	5262.8	5052.8	4932.1	4905.5	4982.8	5146.9	5427.0	6004.0	6846.5
27.5°	6269.5	6233.3	5979.8	5666.0	5402.8	5364.2	5347.3	5417.3	5629.8	6211.6	7150.7
30°	7114.5	7080.7	6807.9	6397.5	6032.9	5970.2	5810.8	5774.6	5931.5	6494.0	7573.1
32.5°	8041.5	8019.8	7693.9	7196.5	6708.9	6636.5	6368.5	6271.9	6395.0	6921.3	8162.2
35°	8818.8	8799.5	8529.1	8017.3	7421.1	7331.7	7058.9	6950.3	7013.1	7469.3	8932.3
37.5°	9521.4	9511.7	9279.9	8876.8	8261.2	8152.5	7845.9	7809.7	7797.7	8191.2	9866.6
40°	10173.2	10149.0	9907.6	9695.2	9238.9	9139.9	8869.5	8838.2	8746.4	9079.6	10924.0
42.5°	10895.0	10832.2	10482.2	10383.2	10260.1	10178.0	10016.3	10021.1	9818.3	10081.4	12044.1
45°	11484.0	11447.8	11088.1	11030.2	11163.0	11129.2	11269.2	11305.4	10911.9	11131.6	13207.7
47.5°	12116.6	12082.8	11778.6	11737.5	12097.2	12106.9	12601.8	12613.9	11978.9	12222.8	14373.8
50°	12896.3	12848.0	12546.3	12597.0	13000.1	13036.3	13941.6	13859.6	12961.5	13330.9	15530.1
52.5°	13410.5	13439.5	13374.3	13456.4	14006.8	14040.6	15259.8	15049.7	13934.4	14424.5	16664.8
55°	13789.5	13847.5	14050.3	14238.6	15069.0	15102.8	16503.0	16182.0	14740.7	15438.4	17731.8
57.5°	14277.2	14195.1	14574.1	14941.1	16078.2	16167.5	17712.5	17273.1	15455.3	16312.3	18463.3
60°	14977.3	14919.4	15213.9	15757.1	17208.0	17350.4	18992.0	18255.7	15979.2	17005.2	18605.8
62.5°	16396.8	16252.0	16297.8	16778.3	18632.3	18820.6	20435.7	19112.7	16239.9	17275.6	17842.9
65°	18518.8	18270.2	18038.4	18371.6	20638.5	20824.3	22065.2	19786.3	16143.3	16751.7	15817.4
67.5°	21191.3	20945.1	20660.2	20974.0	23593.4	23740.6	24076.2	20165.3	15382.9	14733.5	12237.3
70°	23395.4	23303.7	23644.1	24935.6	28313.0	28317.8	26654.5	19851.4	13299.5	10446.0	7080.7
72.5°	23103.3	23047.8	24841.5	28834.5	34261.4	34133.5	29095.2	17475.9	8958.9	4712.4	2653.1
75°	18953.4	19313.1	22091.8	28764.4	36397.9	36381.0	27600.8	11109.9	3705.7	1953.0	1371.2
77.5°	10163.5	10733.3	14342.4	21237.2	28414.4	28841.7	19404.8	3886.8	1590.9	1250.5	948.8
80°	3314.6	3811.9	5716.7	10812.9	18463.3	18383.7	8316.7	1525.7	1088.8	886.0	656.6
82.5°	1407.4	1465.4	2554.2	5105.9	9475.5	9328.2	2648.3	876.3	765.3	605.9	405.6
85°	550.4	615.6	1127.4	2361.0	4104.0	4014.7	956.0	434.5	490.1	395.9	241.4
87.5°	181.1	219.7	403.2	808.7	1277.1	1231.2	234.2	149.7	212.4	181.1	86.9
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: P884841
 CATALOG NUMBER: NAV-SB5D-830-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8	5950.8
2.5°	6001.5	6040.2	6086.0	6153.6	6211.6	6259.9	6310.6	6341.9	6354.0	6390.2	6387.8
5°	6045.0	6129.5	6243.0	6354.0	6462.6	6527.8	6585.8	6614.7	6641.3	6660.6	6665.4
7.5°	6117.4	6226.1	6404.7	6549.6	6641.3	6694.4	6733.0	6723.4	6733.0	6737.9	6745.1
10°	6180.2	6332.3	6544.7	6682.3	6752.3	6754.8	6745.1	6711.3	6694.4	6696.8	6701.6
12.5°	6255.0	6424.0	6653.4	6769.2	6788.6	6735.4	6694.4	6636.5	6614.7	6605.1	6600.3
15°	6356.4	6549.6	6771.7	6815.1	6766.8	6699.2	6629.2	6535.1	6486.8	6448.2	6460.2
17.5°	6479.5	6692.0	6863.4	6832.0	6728.2	6617.1	6503.7	6361.3	6262.3	6221.2	6223.6
20°	6650.9	6841.7	6933.4	6795.8	6638.9	6469.9	6276.8	6102.9	6011.2	5970.2	5965.3
22.5°	6858.6	7042.0	7001.0	6733.0	6510.9	6240.5	5999.1	5871.2	5825.3	5796.3	5801.2
25°	7107.2	7264.1	7049.3	6641.3	6300.9	5936.4	5750.5	5709.4	5687.7	5666.0	5666.0
27.5°	7430.7	7515.2	7085.5	6506.1	5972.6	5612.9	5545.3	5552.5	5545.3	5509.1	5516.3
30°	7858.0	7841.1	7119.3	6286.4	5596.0	5320.8	5325.6	5357.0	5361.8	5337.7	5349.7
32.5°	8420.5	8249.1	7136.2	6001.5	5236.3	5064.9	5069.7	5103.5	5127.6	5086.6	5105.9
35°	9101.3	8724.7	7109.6	5644.3	4958.6	4821.0	4784.8	4794.5	4801.7	4763.1	4789.6
37.5°	9895.5	9258.2	6991.3	5248.3	4729.3	4582.0	4504.8	4439.6	4401.0	4364.8	4388.9
40°	10767.1	9840.0	6774.1	4862.1	4473.4	4328.5	4212.7	4089.5	3959.2	3910.9	3932.6
42.5°	11679.6	10438.7	6510.9	4492.7	4178.9	4060.6	3937.5	3758.8	3563.3	3464.3	3476.4
45°	12625.9	11051.9	6252.6	4128.2	3877.1	3826.4	3684.0	3469.1	3256.7	3131.1	3121.5
47.5°	13553.0	11631.3	5873.6	3761.2	3594.6	3650.2	3539.1	3341.2	3104.6	2906.6	2884.9
50°	14439.0	12174.5	5253.2	3389.4	3365.3	3597.1	3490.8	3206.0	2935.6	2682.1	2660.4
52.5°	15317.7	12613.9	4458.9	3051.5	3242.2	3582.6	3428.1	3114.2	2783.5	2517.9	2489.0
55°	16063.7	12840.8	3693.6	2761.8	3063.5	3459.5	3353.2	3005.6	2568.6	2286.2	2262.0
57.5°	16488.6	12657.3	3056.3	2476.9	2817.3	3256.7	3225.3	2773.8	2312.7	2095.5	2066.5
60°	16305.1	11913.8	2534.8	2228.2	2583.1	3037.0	3003.2	2544.5	2117.2	1912.0	1883.0
62.5°	15293.6	10496.7	2122.0	2011.0	2370.7	2812.5	2781.1	2368.3	1967.5	1769.6	1738.2
65°	13256.0	8538.8	1800.9	1829.9	2155.8	2542.1	2588.0	2221.0	1849.2	1656.1	1624.7
67.5°	10110.4	6185.0	1549.9	1673.0	1945.8	2276.5	2409.3	2114.8	1750.2	1566.8	1537.8
70°	5762.5	3512.6	1337.4	1520.9	1759.9	2030.3	2271.7	2030.3	1644.0	1491.9	1472.6
72.5°	2184.8	1612.6	1156.4	1368.8	1581.3	1822.7	2119.6	1897.5	1520.9	1407.4	1388.1
75°	1166.0	982.6	972.9	1190.2	1376.1	1619.9	1928.9	1767.1	1429.2	1487.1	1535.4
77.5°	794.3	695.3	813.6	1018.8	1151.5	1395.4	1726.1	1569.2	1238.5	1233.6	1137.1
80°	550.4	492.5	661.5	820.8	890.8	1173.3	1506.4	1347.1	1009.1	941.5	900.5
82.5°	330.7	321.1	494.9	613.2	630.1	905.3	1248.1	1129.8	825.6	719.4	724.2
85°	181.1	190.7	316.3	359.7	366.9	632.5	977.7	873.9	634.9	533.5	538.4
87.5°	50.7	65.2	115.9	142.4	176.2	328.3	581.8	519.0	318.7	222.1	222.1
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)