

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: P968928

Luminaire Tested: **NAV-SB5C-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34631.7 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 249.5
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



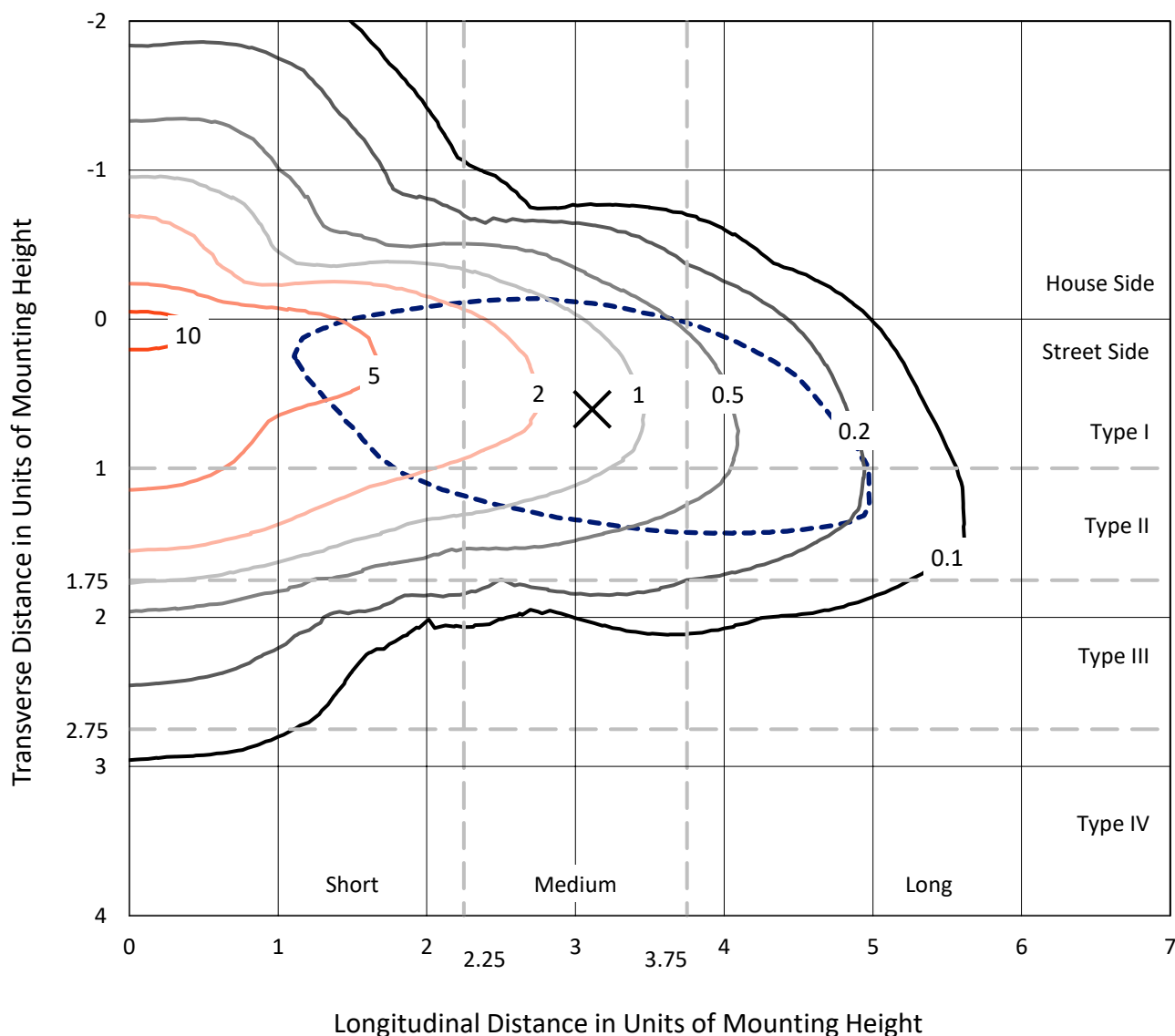
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

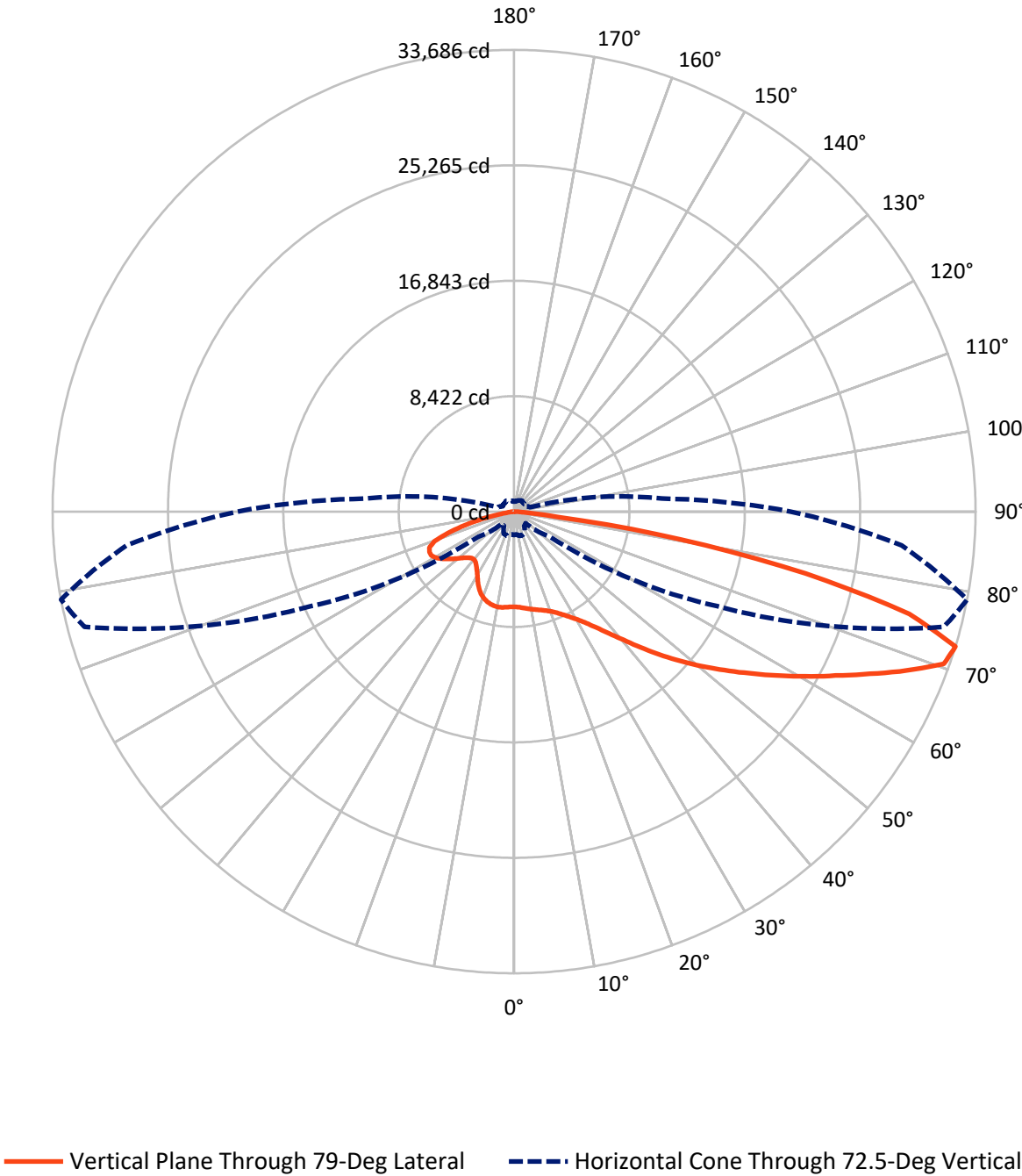
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7620.9	0.0	7620.9
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	27010.8	0.0	27010.8
	% Fixture	78.0	0.0	78.0
Total	Lumens	34631.7	0.0	34631.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	631.0	1.8
10°-20°	1649.9	4.8
20°-30°	2662.2	7.7
30°-40°	3995.6	11.5
40°-50°	5667.9	16.4
50°-60°	7157.8	20.7
60°-70°	7269.8	21.0
70°-80°	4954.7	14.3
80°-90°	642.8	1.9
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°	34631.7	100.0
0°-180°	34631.7	100.0

Coefficient of Utilization



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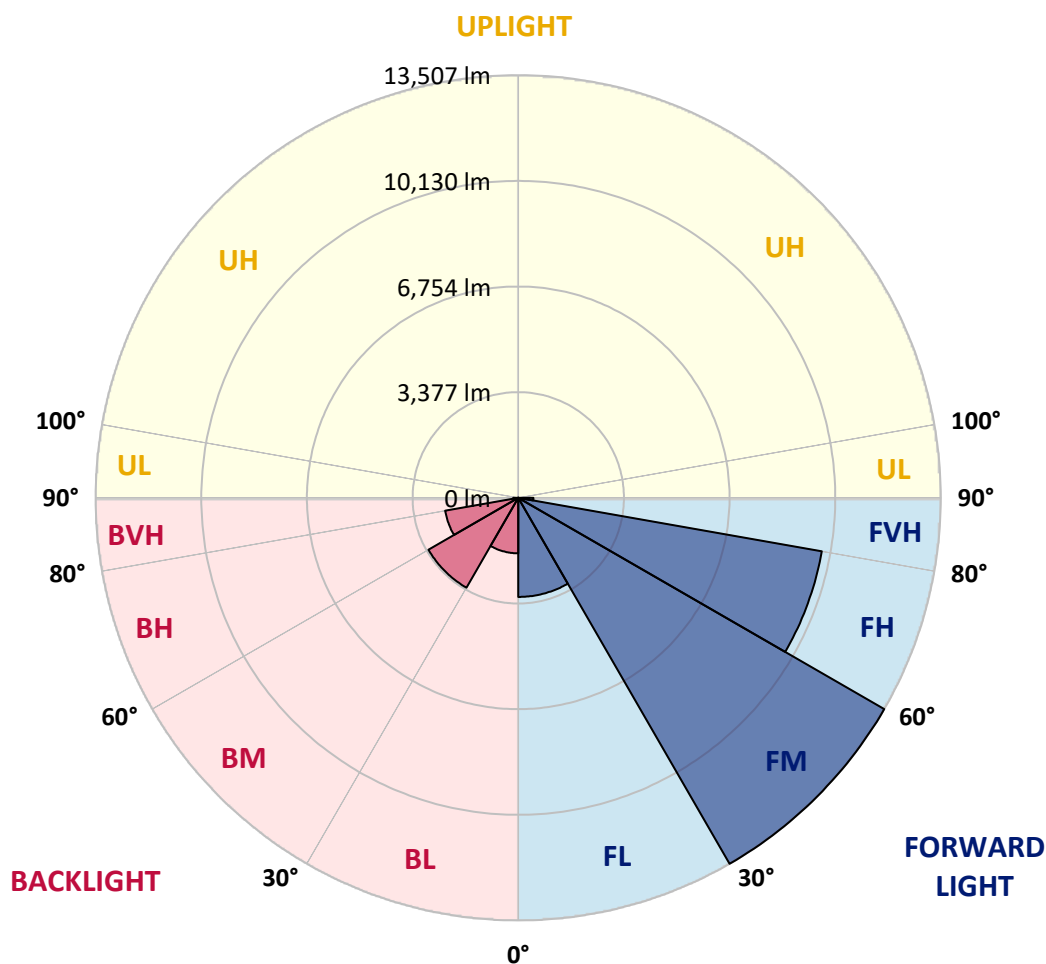
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3168.0	9.1			
FM	(30°-60°)	13507.1	39.0			
FH	(60°-80°)	9851.5	28.4			G4/12000
FVH	(80°-90°)	484.2	1.4			G3/500
BL	(0°-30°)	1775.1	5.1	B3/2500		
BM	(30°-60°)	3314.3	9.6	B3/5000		
BH	(60°-80°)	2372.9	6.9	B3/2500		G3/2500
BVH	(80°-90°)	158.6	0.5			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0
2.5°	6955.6	6922.6	6942.8	6935.5	6944.7	6955.6	6959.3	6964.8	6983.1	6981.3	6979.4
5°	6941.0	6908.0	6935.5	6926.3	6950.1	6975.8	6997.8	7018.0	7047.3	7060.1	7041.7
7.5°	6909.8	6887.9	6915.4	6942.8	6986.8	7025.2	7056.4	7102.2	7144.4	7151.6	7164.4
10°	6728.5	6712.0	6776.1	6847.5	6968.5	7072.9	7140.7	7193.8	7239.6	7247.0	7265.2
12.5°	6539.8	6519.6	6591.1	6688.2	6884.2	7072.9	7215.8	7285.4	7325.7	7349.5	7376.9
15°	6508.6	6492.1	6532.5	6616.8	6779.8	7023.4	7267.0	7395.3	7430.1	7457.6	7468.6
17.5°	6658.9	6627.8	6644.3	6673.6	6768.8	6977.6	7307.3	7519.9	7573.0	7602.3	7602.3
20°	7006.9	6962.9	6937.3	6878.7	6862.2	6985.0	7303.7	7670.1	7739.7	7776.4	7785.5
22.5°	7470.4	7441.1	7386.2	7237.7	7076.5	7074.8	7373.3	7862.5	7992.4	8027.3	8005.4
25°	8031.0	7987.0	7917.4	7715.9	7406.2	7252.4	7490.6	8107.9	8325.9	8335.1	8270.9
27.5°	8675.8	8609.8	8514.6	8249.0	7831.3	7530.9	7670.1	8390.0	8708.7	8705.1	8573.2
30°	9355.4	9289.5	9188.7	8866.2	8340.5	7906.3	7919.3	8694.0	9163.1	9142.9	8917.6
32.5°	9851.9	9802.4	9782.2	9533.1	8926.7	8349.8	8205.0	9031.2	9723.7	9705.3	9390.2
35°	10232.9	10168.7	10192.6	10066.2	9566.1	8846.2	8554.9	9432.4	10405.1	10403.2	10011.2
37.5°	10610.3	10553.5	10573.6	10489.3	10157.8	9476.3	8981.7	9923.3	11249.6	11289.9	10762.3
40°	10954.6	10894.2	10974.8	10896.1	10617.6	10146.8	9467.1	10478.4	12227.8	12304.7	11670.9
42.5°	11161.6	11114.0	11247.7	11249.6	11016.9	10712.8	10000.2	11090.2	13359.8	13532.0	12788.3
45°	11233.1	11216.6	11418.1	11460.2	11370.4	11040.7	10480.2	11757.0	14579.9	14887.7	14061.5
47.5°	11156.1	11125.0	11403.4	11559.1	11630.6	11194.6	10877.7	12478.8	15825.6	16276.3	15450.0
50°	10767.8	10707.4	11121.4	11449.2	11703.9	11295.4	11278.9	13312.3	17241.6	17734.4	16846.0
52.5°	10069.8	10024.1	10494.9	11064.6	11542.6	11344.8	11729.5	14222.7	18586.2	19223.8	18276.7
55°	9177.7	9117.3	9635.7	10379.5	11141.4	11328.3	12180.2	15241.2	20172.6	20819.3	19755.0
57.5°	7763.5	7642.6	8298.4	9177.7	10487.5	11308.2	12649.1	16254.2	21784.7	22559.6	21332.2
60°	5700.8	5521.3	6325.5	7367.8	9208.8	11112.1	13229.8	17390.0	23719.1	24417.1	23054.2
62.5°	3319.4	3214.9	3740.7	4713.5	6941.0	9958.1	13555.9	18710.8	25620.7	26353.4	24746.9
65°	2577.5	2548.1	2594.0	2669.0	3863.4	7455.7	12550.2	19998.6	28038.8	28551.7	26510.9
67.5°	2357.6	2335.7	2355.8	2214.7	1960.1	4152.9	9928.8	20324.7	30629.0	30940.4	28055.2
70°	2095.7	2070.0	2136.0	2015.0	1542.4	1888.7	6415.3	19141.3	32689.9	33274.3	29229.4
72.5°	1707.3	1678.0	1831.9	1776.9	1298.8	1212.7	3222.3	16329.4	32473.7	33686.4	28388.6
75°	1311.6	1295.1	1478.4	1524.1	1058.8	954.4	1546.1	12138.0	28577.3	29799.2	24466.5
77.5°	1018.5	1005.7	1099.1	1265.9	853.6	740.0	950.8	7699.4	21535.6	21749.9	16860.6
80°	763.9	727.2	813.3	980.1	665.0	540.4	644.8	4489.9	13612.7	12339.6	7338.5
82.5°	478.2	459.8	531.3	653.9	468.9	371.9	419.5	2480.4	5455.4	3213.1	1416.0
85°	273.0	265.6	289.5	373.7	254.6	214.3	240.0	1095.4	996.5	685.1	426.8
87.5°	109.9	106.3	131.9	166.7	93.4	78.7	84.3	263.8	219.9	203.4	141.0
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°	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0	6952.0
2.5°	6972.2	6972.2	6946.5	6906.1	6860.4	6831.1	6783.4	6770.6	6721.1	6706.5	6730.4
5°	7056.4	7041.7	6962.9	6849.4	6693.7	6550.8	6393.2	6294.3	6155.1	6105.6	6142.3
7.5°	7162.6	7122.3	6986.8	6737.6	6411.6	6091.0	5757.6	5504.8	5263.0	5176.9	5187.8
10°	7259.8	7203.0	6972.2	6536.1	5972.0	5416.8	4885.7	4513.8	4231.6	4116.2	4141.9
12.5°	7356.8	7252.4	6875.1	6200.9	5347.2	4594.4	4028.2	3738.9	3564.8	3425.7	3471.4
15°	7448.4	7301.9	6724.8	5752.1	4662.1	3898.3	3480.6	3249.8	3110.6	3018.9	3035.4
17.5°	7554.7	7344.0	6499.5	5182.4	4010.0	3416.4	3075.7	2936.5	2909.1	2898.0	2905.4
20°	7703.1	7382.5	6202.8	4544.8	3530.0	3031.7	2855.9	2843.0	2841.2	2835.8	2854.1
22.5°	7862.5	7428.3	5810.7	3966.0	3121.5	2791.8	2760.6	2735.0	2718.5	2716.7	2736.9
25°	8051.1	7442.9	5319.7	3491.6	2773.4	2678.2	2641.5	2603.1	2592.1	2592.1	2603.1
27.5°	8234.3	7393.4	4748.2	3079.4	2577.5	2573.8	2526.1	2513.3	2511.5	2517.0	2531.6
30°	8417.5	7300.0	4180.4	2698.3	2463.9	2463.9	2447.4	2456.5	2463.9	2482.2	2495.1
32.5°	8664.7	7201.1	3705.9	2416.2	2365.0	2346.6	2363.1	2381.5	2388.8	2412.5	2432.7
35°	9027.5	7131.5	3328.5	2262.4	2262.4	2238.6	2247.7	2244.0	2227.5	2216.6	2242.2
37.5°	9507.5	7127.8	3017.1	2190.9	2176.3	2172.6	2174.4	2150.7	2086.5	2009.6	2011.4
40°	10084.5	7226.8	2777.1	2141.4	2130.5	2152.5	2141.4	2077.4	1901.5	1767.7	1764.1
42.5°	10859.4	7508.8	2623.3	2081.1	2114.0	2141.4	2097.5	1875.9	1756.7	1667.1	1663.4
45°	11771.6	7966.8	2544.5	2016.9	2082.8	2115.8	1903.3	1806.3	1710.9	1602.9	1595.6
47.5°	12804.8	8543.9	2526.1	1956.4	2013.2	2033.4	1820.9	1776.9	1668.8	1551.6	1542.4
50°	13929.6	9227.2	2575.6	1885.0	1912.4	1842.8	1793.4	1753.1	1641.3	1525.9	1513.1
52.5°	15092.8	9980.1	2674.5	1787.9	1811.7	1734.8	1782.4	1747.6	1624.8	1469.1	1458.2
55°	16235.9	10738.5	2769.8	1674.3	1709.2	1637.7	1751.3	1725.6	1549.8	1373.9	1364.8
57.5°	17397.3	11493.2	2863.2	1573.6	1610.2	1544.3	1701.8	1667.1	1465.5	1286.0	1282.3
60°	18604.6	12226.0	2907.2	1476.5	1502.1	1458.2	1626.7	1566.3	1370.2	1196.2	1190.7
62.5°	19734.8	12836.0	2835.8	1379.4	1395.8	1377.6	1527.8	1447.2	1275.0	1095.4	1093.7
65°	20868.8	13198.7	2615.9	1284.1	1287.8	1278.7	1388.6	1319.0	1163.3	1007.6	996.5
67.5°	21896.5	13402.0	2266.1	1181.5	1172.4	1168.7	1258.5	1179.8	1055.1	919.6	908.7
70°	22114.5	12885.5	1731.1	1060.7	1060.7	1051.5	1115.6	1035.0	936.1	826.2	822.6
72.5°	20198.3	10839.3	1229.2	923.2	937.9	919.6	972.7	905.0	815.2	741.9	720.0
75°	16287.2	7948.6	894.0	782.2	807.9	776.7	826.2	778.6	701.6	699.8	630.2
77.5°	11190.9	4915.0	648.5	644.8	663.2	622.8	679.7	653.9	584.4	553.2	518.4
80°	4775.7	1960.1	472.6	498.3	498.3	461.7	527.6	534.9	474.5	459.8	459.8
82.5°	950.8	556.9	331.6	342.6	322.4	311.4	373.7	414.0	571.5	635.7	637.4
85°	285.8	205.2	199.7	186.9	164.8	166.7	219.9	415.8	512.9	293.2	252.8
87.5°	78.7	51.2	53.1	42.1	34.8	45.8	75.1	315.1	172.2	73.3	62.3
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)