

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: P966665

Luminaire Tested: **NAV-SB4C-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966665
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-SB4C-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 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: 30578.8 lumens
Efficiency: N/A
Efficacy: 152.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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

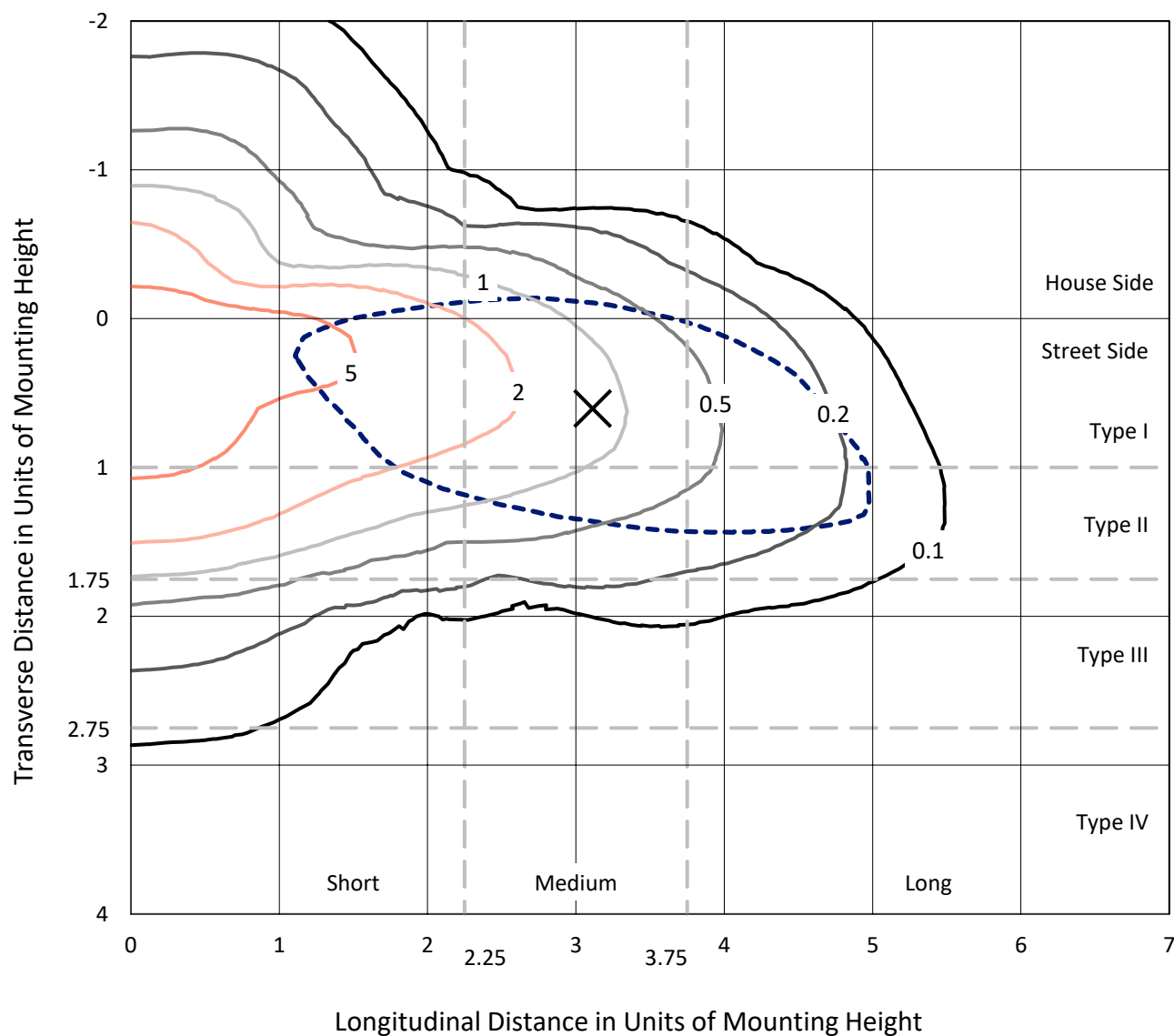


REPORT NUMBER: P966665

CATALOG NUMBER: NAV-SB4C-735-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

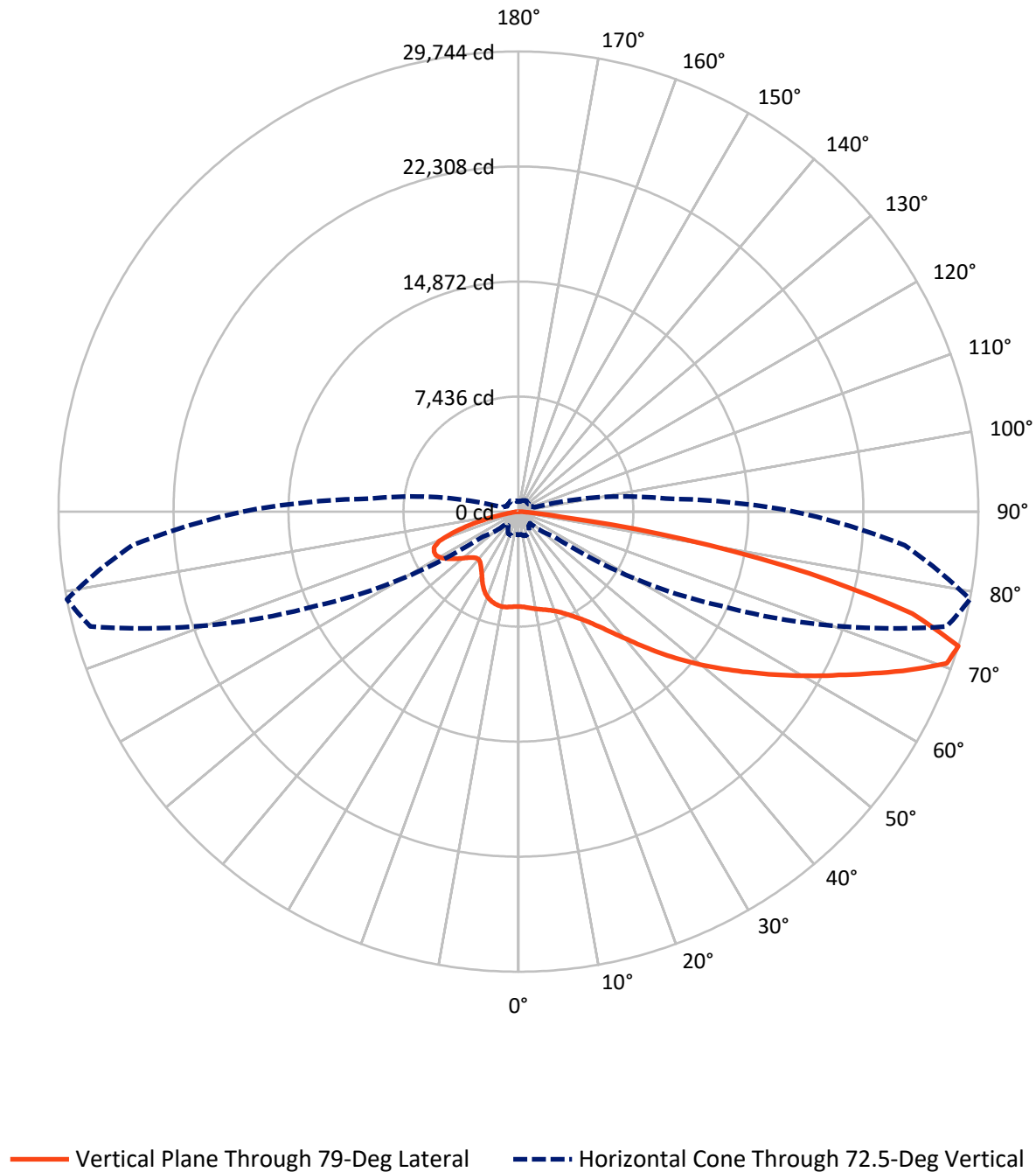
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc
Type II - Medium - N/A

REPORT NUMBER: P966665
CATALOG NUMBER: NAV-SB4C-735-U-SL2

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6729.0	0.0	6729.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	23849.8	0.0	23849.8
	% Fixture	78.0	0.0	78.0
Total	Lumens	30578.8	0.0	30578.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	557.2	1.8
10°-20°	1456.8	4.8
20°-30°	2350.6	7.7
30°-40°	3528.0	11.5
40°-50°	5004.6	16.4
50°-60°	6320.2	20.7
60°-70°	6419.0	21.0
70°-80°	4374.8	14.3
80°-90°	567.6	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°	30578.8	100.0
0°-180°	30578.8	100.0

Coefficient of Utilization



REPORT NUMBER: P966665

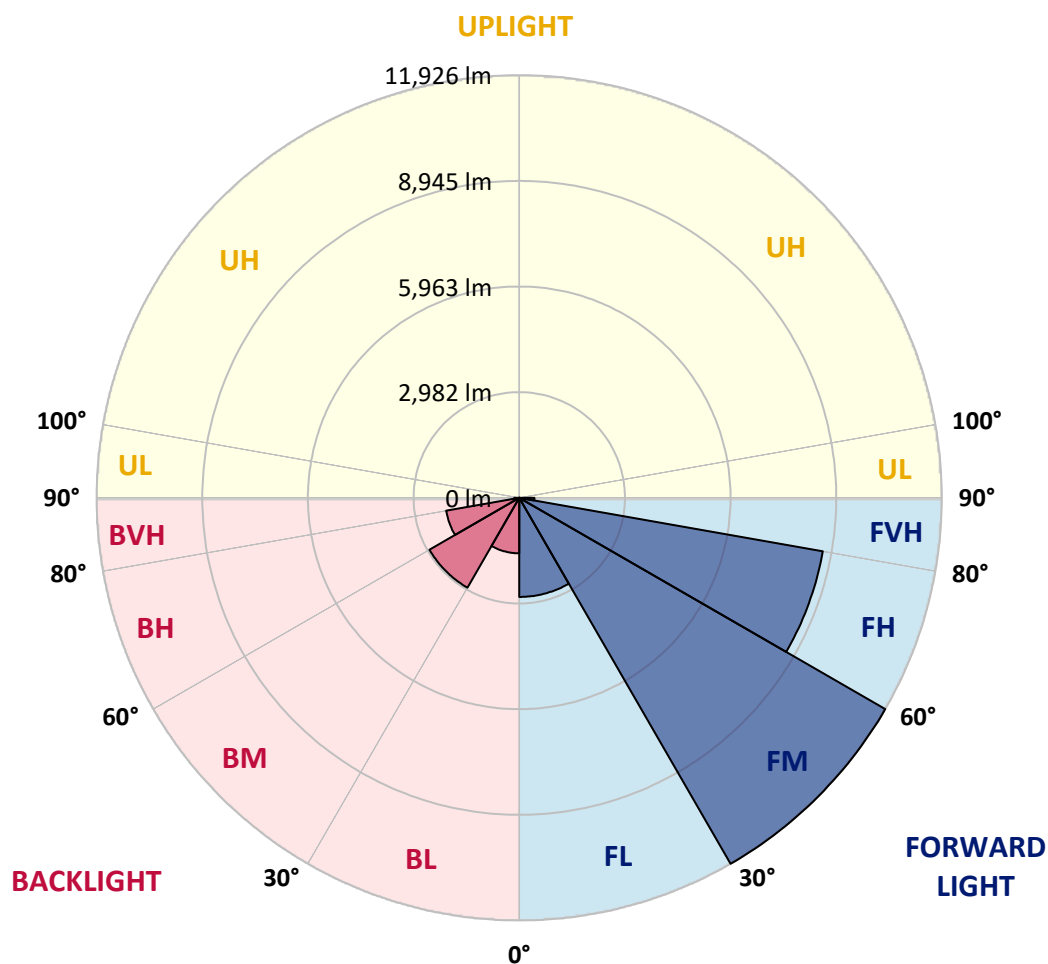
CATALOG NUMBER: NAV-SB4C-735-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2797.2	9.1			
FM	(30°-60°)	11926.4	39.0			
FH	(60°-80°)	8698.6	28.4			G4/12000
FVH	(80°-90°)	427.6	1.4			G3/500
BL	(0°-30°)	1567.4	5.1	B3/2500		
BM	(30°-60°)	2926.4	9.6	B3/5000		
BH	(60°-80°)	2095.2	6.9	B3/2500		G3/2500
BVH	(80°-90°)	140.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



REPORT NUMBER: P966665

CATALOG NUMBER: NAV-SB4C-735-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4
2.5°	6141.6	6112.5	6130.3	6123.9	6132.0	6141.6	6144.9	6149.7	6165.9	6164.2	6162.7
5°	6128.7	6099.6	6123.9	6115.8	6136.8	6159.4	6178.8	6196.6	6222.5	6233.8	6217.6
7.5°	6101.2	6081.8	6106.0	6130.3	6169.2	6203.1	6230.6	6271.1	6308.3	6314.7	6326.0
10°	5941.1	5926.5	5983.1	6046.2	6153.0	6245.1	6305.0	6351.9	6392.3	6398.9	6415.0
12.5°	5774.4	5756.7	5819.7	5905.5	6078.6	6245.1	6371.3	6432.8	6468.4	6489.4	6513.7
15°	5747.0	5732.4	5768.0	5842.4	5986.4	6201.5	6416.6	6529.9	6560.6	6584.8	6594.5
17.5°	5879.6	5852.1	5866.7	5892.5	5976.7	6161.1	6452.2	6639.8	6686.7	6712.6	6712.6
20°	6186.9	6148.2	6125.5	6073.7	6059.2	6167.5	6449.0	6772.5	6834.0	6866.3	6874.4
22.5°	6596.2	6570.2	6521.8	6390.8	6248.4	6246.8	6510.4	6942.3	7057.1	7087.9	7068.5
25°	7091.2	7052.3	6990.8	6812.9	6539.5	6403.7	6613.9	7159.0	7351.5	7359.6	7303.0
27.5°	7660.4	7602.2	7518.2	7283.5	6914.9	6649.6	6772.5	7408.2	7689.6	7686.4	7569.9
30°	8260.6	8202.4	8113.4	7828.7	7364.5	6981.2	6992.4	7676.6	8090.7	8072.9	7873.9
32.5°	8698.9	8655.2	8637.5	8417.5	7882.0	7372.5	7244.8	7974.3	8585.7	8569.5	8291.3
35°	9035.4	8978.7	8999.8	8888.2	8446.6	7810.9	7553.7	8328.5	9187.4	9185.7	8839.6
37.5°	9368.6	9318.4	9336.2	9261.8	8969.1	8367.3	7930.6	8762.0	9933.1	9968.6	9502.8
40°	9672.6	9619.2	9690.5	9620.9	9375.1	8959.3	8359.3	9252.1	10796.8	10864.7	10305.0
42.5°	9855.4	9813.3	9931.4	9933.1	9727.7	9459.1	8830.0	9792.3	11796.4	11948.4	11291.8
45°	9918.5	9904.0	10081.9	10119.1	10039.8	9748.7	9253.7	10381.1	12873.7	13145.4	12415.9
47.5°	9850.6	9823.1	10068.9	10206.4	10269.5	9884.5	9604.7	11018.4	13973.6	14371.5	13642.0
50°	9507.7	9454.3	9819.8	10109.4	10334.2	9973.5	9958.9	11754.4	15223.9	15659.0	14874.5
52.5°	8891.4	8851.0	9266.6	9769.7	10191.9	10017.1	10356.8	12558.3	16411.2	16974.0	16137.8
55°	8103.6	8050.2	8508.0	9164.7	9837.6	10002.6	10754.7	13457.6	17811.9	18382.9	17443.1
57.5°	6855.0	6748.2	7327.3	8103.6	9260.2	9984.8	11168.8	14352.0	19235.3	19919.5	18835.8
60°	5033.7	4875.1	5585.2	6505.6	8131.1	9811.7	11681.6	15354.9	20943.4	21559.6	20356.2
62.5°	2930.9	2838.7	3303.0	4161.8	6128.7	8792.8	11969.5	16521.2	22622.4	23269.3	21850.7
65°	2275.8	2250.0	2290.4	2356.7	3411.3	6583.3	11081.5	17658.2	24757.4	25210.4	23408.4
67.5°	2081.7	2062.3	2080.1	1955.6	1730.7	3666.8	8766.8	17946.1	27044.6	27319.5	24772.0
70°	1850.4	1827.8	1886.0	1779.3	1361.9	1667.7	5664.5	16901.2	28864.3	29380.3	25808.8
72.5°	1507.5	1481.6	1617.4	1569.0	1146.8	1070.8	2845.2	14418.4	28673.5	29744.2	25066.4
75°	1158.1	1143.6	1305.3	1345.7	934.9	842.8	1365.2	10717.5	25232.9	26311.9	21603.3
77.5°	899.3	888.0	970.5	1117.7	753.8	653.4	839.5	6798.3	19015.3	19204.6	14887.5
80°	674.4	642.2	718.2	865.4	587.1	477.1	569.4	3964.5	12019.7	10895.4	6479.7
82.5°	422.2	406.0	469.0	577.5	414.1	328.3	370.4	2190.1	4816.9	2837.1	1250.3
85°	241.0	234.5	255.5	329.9	224.8	189.2	211.9	967.3	880.0	605.0	376.9
87.5°	97.1	93.8	116.4	147.2	82.5	69.6	74.4	232.9	194.1	179.6	124.5
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: P966665

CATALOG NUMBER: NAV-SB4C-735-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4	6138.4
2.5°	6156.2	6156.2	6133.6	6097.9	6057.5	6031.6	5989.6	5978.3	5934.6	5921.6	5942.6
5°	6230.6	6217.6	6148.2	6047.8	5910.4	5784.2	5645.1	5557.8	5434.8	5391.1	5423.5
7.5°	6324.5	6288.8	6169.2	5949.2	5661.3	5378.2	5083.8	4860.5	4647.0	4571.1	4580.7
10°	6410.1	6360.0	6156.2	5771.3	5273.0	4783.0	4313.9	3985.5	3736.4	3634.5	3657.2
12.5°	6495.8	6403.7	6070.5	5475.2	4721.5	4056.6	3556.9	3301.3	3147.7	3024.7	3065.2
15°	6576.7	6447.4	5937.8	5079.0	4116.5	3442.1	3073.3	2869.5	2746.5	2665.6	2680.2
17.5°	6670.6	6484.6	5738.9	4575.9	3540.7	3016.7	2715.7	2592.8	2568.5	2558.9	2565.4
20°	6801.6	6518.5	5476.9	4013.0	3116.9	2677.0	2521.7	2510.3	2508.8	2503.9	2520.1
22.5°	6942.3	6559.0	5130.7	3501.9	2756.2	2465.0	2437.6	2414.9	2400.3	2398.7	2416.5
25°	7108.9	6571.9	4697.3	3083.0	2448.9	2364.8	2332.4	2298.5	2288.7	2288.7	2298.5
27.5°	7270.6	6528.2	4192.6	2719.0	2275.8	2272.6	2230.5	2219.2	2217.6	2222.4	2235.4
30°	7432.4	6445.7	3691.1	2382.6	2175.6	2175.6	2161.0	2169.1	2175.6	2191.8	2203.0
32.5°	7650.8	6358.4	3272.2	2133.4	2088.2	2072.0	2086.6	2102.8	2109.2	2130.3	2148.0
35°	7971.0	6296.9	2939.0	1997.6	1997.6	1976.6	1984.7	1981.4	1966.9	1957.1	1979.8
37.5°	8394.9	6293.7	2664.0	1934.5	1921.6	1918.4	1919.9	1898.9	1842.3	1774.4	1776.0
40°	8904.4	6381.0	2452.1	1890.8	1881.2	1900.6	1890.8	1834.2	1679.0	1560.9	1557.7
42.5°	9588.6	6630.1	2316.3	1837.5	1866.6	1890.8	1852.1	1656.3	1551.1	1471.9	1468.7
45°	10394.0	7034.5	2246.7	1780.8	1839.1	1868.2	1680.6	1594.9	1510.7	1415.3	1408.9
47.5°	11306.4	7544.0	2230.5	1727.5	1777.7	1795.4	1607.8	1569.0	1473.5	1370.0	1361.9
50°	12299.5	8147.3	2274.2	1664.4	1688.7	1627.2	1583.5	1548.0	1449.2	1347.4	1336.1
52.5°	13326.5	8812.1	2361.5	1578.7	1599.7	1531.8	1573.8	1543.1	1434.7	1297.2	1287.5
55°	14335.9	9481.8	2445.6	1478.4	1509.1	1446.1	1546.3	1523.7	1368.4	1213.1	1205.0
57.5°	15361.4	10148.2	2528.2	1389.4	1421.8	1363.6	1502.6	1471.9	1294.0	1135.5	1132.2
60°	16427.4	10795.2	2567.0	1303.7	1326.4	1287.5	1436.3	1382.9	1209.9	1056.3	1051.3
62.5°	17425.3	11333.8	2503.9	1218.0	1232.6	1216.4	1349.0	1277.9	1125.8	967.3	965.7
65°	18426.5	11654.0	2309.8	1133.9	1137.1	1129.0	1226.1	1164.6	1027.2	889.6	880.0
67.5°	19334.0	11833.6	2000.8	1043.2	1035.2	1032.0	1111.2	1041.7	931.7	812.0	802.3
70°	19526.5	11377.5	1528.6	936.5	936.5	928.4	985.0	913.9	826.6	729.5	726.2
72.5°	17834.6	9570.7	1085.4	815.2	828.2	812.0	858.8	799.1	719.8	655.1	635.7
75°	14381.2	7018.3	789.4	690.6	713.3	685.8	729.5	687.5	619.5	617.9	556.4
77.5°	9881.3	4339.7	572.6	569.4	585.6	549.9	600.1	577.5	516.0	488.5	457.8
80°	4216.8	1730.7	417.3	439.9	439.9	407.6	465.9	472.3	418.9	406.0	406.0
82.5°	839.5	491.7	292.7	302.5	284.6	275.0	329.9	365.5	504.7	561.3	562.9
85°	252.4	181.1	176.3	165.0	145.5	147.2	194.1	367.2	452.9	258.8	223.2
87.5°	69.6	45.3	46.9	37.2	30.7	40.5	66.3	278.2	152.0	64.7	55.0
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)