

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: P885516

Luminaire Tested: **NAV-SB6D-830-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39465 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

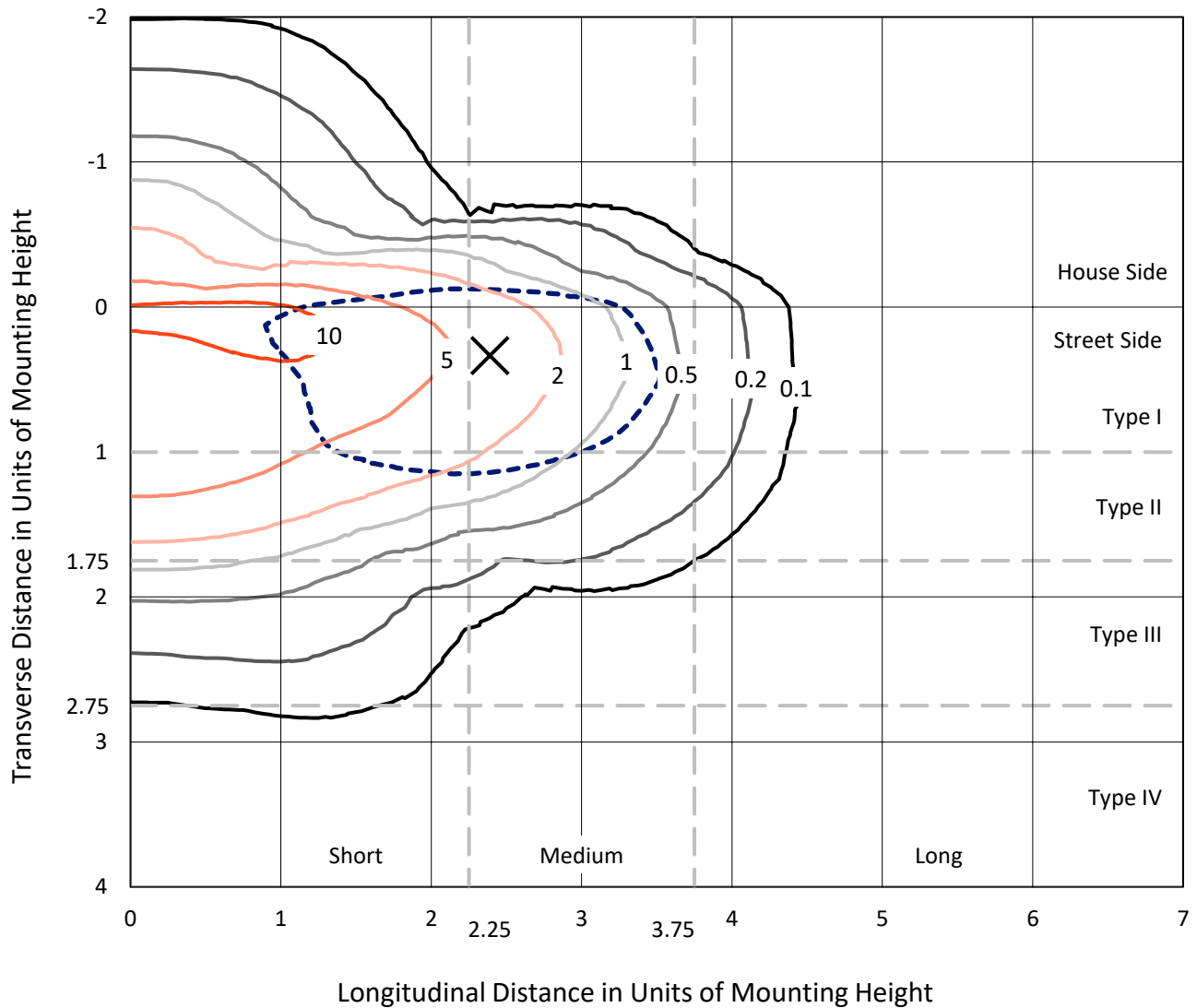
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

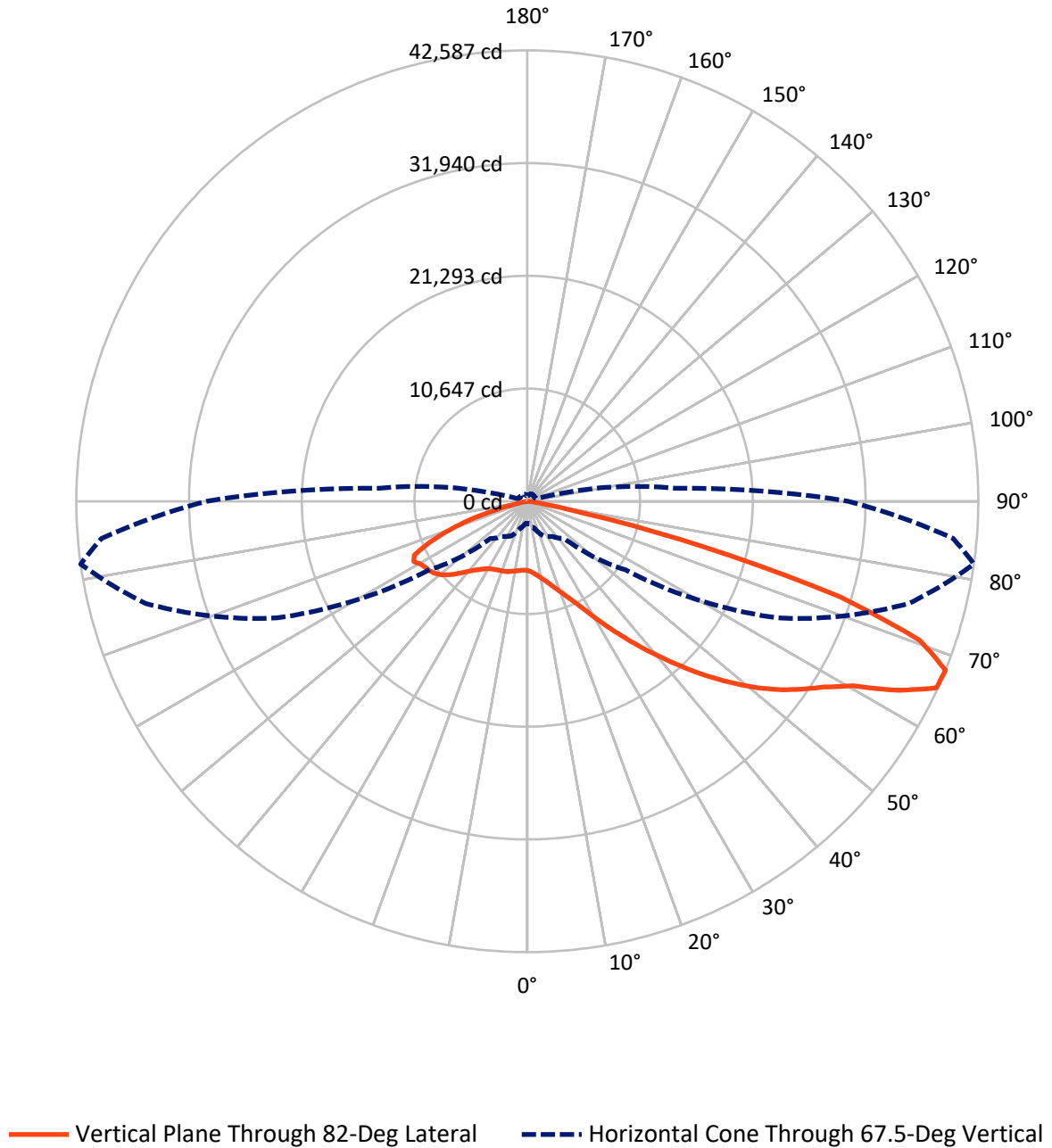
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.8 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	7148.7	0.0	7148.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	32316.3	0.0	32316.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	39465.0	0.0	39465.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	582.5	1.5
10°-20°	1513.7	3.8
20°-30°	2424.4	6.1
30°-40°	4287.1	10.9
40°-50°	7511.4	19.0
50°-60°	10018.0	25.4
60°-70°	9326.3	23.6
70°-80°	3579.4	9.1
80°-90°	222.3	0.6
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°	39465.0	100.0
0°-180°	39465.0	100.0

Coefficient of Utilization



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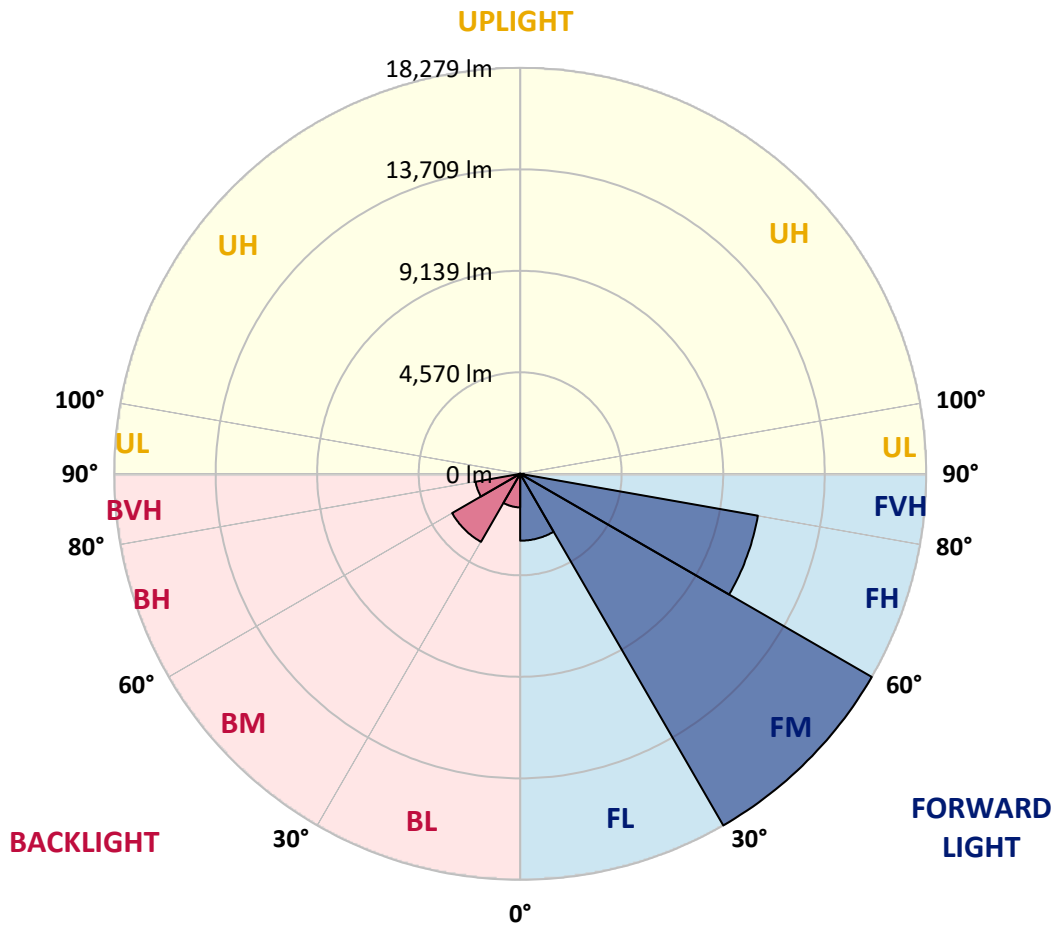
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3010.7	7.6			
FM (30°-60°)	18278.6	46.3			
FH (60°-80°)	10865.3	27.5			G4/12000
FVH (80°-90°)	161.6	0.4			G2/225
BL (0°-30°)	1509.8	3.8	B3/2500		
BM (30°-60°)	3537.9	9.0	B3/5000		
BH (60°-80°)	2040.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	60.7	0.2			G1/100
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°	82°	85°
0°	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0
2.5°	6910.2	6950.0	6927.3	6915.9	6896.0	6867.6	6844.9	6773.8	6700.0	6651.7	6634.6
5°	7049.5	7089.2	7086.4	7097.8	7112.0	7120.5	7114.8	7035.3	6930.1	6847.7	6799.4
7.5°	6930.1	6975.6	7012.5	7069.4	7168.8	7273.9	7325.1	7308.0	7200.1	7086.4	7026.7
10°	6592.0	6640.3	6728.4	6861.9	7072.2	7299.5	7489.9	7578.0	7509.8	7384.7	7302.3
12.5°	5972.6	6020.9	6194.2	6484.0	6836.4	7231.3	7595.0	7830.8	7847.9	7722.9	7626.3
15°	5276.4	5324.7	5509.4	5873.1	6410.2	7043.8	7651.8	8097.9	8248.5	8140.6	8024.1
17.5°	4844.6	4887.2	5026.4	5319.1	5878.8	6668.7	7631.9	8382.1	8725.9	8640.6	8501.4
20°	4713.8	4750.8	4816.1	5020.7	5486.7	6279.4	7501.2	8649.2	9240.2	9191.9	9035.6
22.5°	4853.1	4887.2	4907.1	4998.0	5290.6	6023.7	7336.4	8921.9	9836.9	9842.5	9652.2
25°	5174.2	5208.2	5185.5	5242.3	5370.2	5944.2	7273.9	9243.0	10587.0	10649.5	10433.5
27.5°	5702.6	5705.5	5651.5	5648.7	5668.6	6063.5	7339.3	9586.8	11533.2	11649.7	11382.6
30°	6762.5	6719.9	6512.4	6288.0	6185.7	6421.5	7521.1	9993.1	12649.8	12857.2	12522.0
32.5°	8396.3	8333.8	7953.0	7416.0	6876.1	6998.3	7847.9	10456.3	13865.9	14241.0	13831.8
35°	10169.3	10152.3	9754.5	8956.0	8012.7	7819.5	8379.2	11064.3	15192.9	15789.5	15303.7
37.5°	11817.3	11808.8	11581.5	10641.0	9493.0	8964.6	9231.6	11859.9	16613.5	17477.3	16903.4
40°	13323.2	13348.8	13121.5	12280.4	11124.0	10433.5	10390.9	12843.0	18193.4	19315.7	18633.8
42.5°	14624.6	14653.0	14422.8	13800.6	12735.1	12058.8	11814.5	14047.8	19736.2	21290.5	20483.5
45°	15508.3	15684.4	15650.3	15153.1	14388.7	13686.9	13525.0	15559.4	21495.0	23384.6	22438.4
47.5°	15758.3	15920.3	16176.0	16244.2	15778.2	15087.7	15280.9	17380.7	23273.7	25481.5	24404.6
50°	15141.7	15292.3	15823.6	16531.1	16855.1	16642.0	16988.6	19332.7	25095.1	27572.7	26333.9
52.5°	13925.6	14079.0	14749.6	15869.1	17190.3	17860.9	18702.0	21256.4	26859.6	29553.2	28160.9
55°	12166.8	12328.7	13189.7	14456.9	16551.0	18363.8	20131.2	23177.1	28476.3	31334.7	29808.9
57.5°	9774.3	9893.7	10788.7	12561.7	14942.8	17863.8	21185.3	25274.1	29999.3	33085.0	31442.7
60°	6370.4	6475.5	7515.4	9493.0	12277.6	16193.0	21395.6	27612.5	32022.4	35361.0	33644.8
62.5°	4236.5	4307.5	4924.1	6376.1	8646.3	12985.1	20165.3	29479.3	34988.8	39321.9	37421.0
65°	2906.7	2977.8	3594.3	4605.9	5586.2	8589.5	16627.8	29232.1	37676.7	42467.3	40219.7
67.5°	2074.2	2133.9	2656.7	3611.4	4043.3	4989.5	11271.8	26072.5	37290.3	42586.6	40370.3
70°	1486.0	1520.1	1952.0	2813.0	3213.6	2997.7	6268.1	19940.8	32650.3	39324.7	37296.0
72.5°	1039.9	1051.3	1355.3	2142.4	2588.5	2187.9	2983.4	13294.8	24694.4	30865.9	28913.9
75°	704.7	718.9	912.1	1571.3	2077.0	1670.7	1579.8	7129.0	14496.7	17085.2	15315.0
77.5°	431.9	437.6	588.2	1074.0	1554.2	1272.9	1017.2	3020.4	5608.9	5506.6	4694.0
80°	244.4	244.4	375.1	667.7	1059.8	821.2	713.2	1284.3	1775.9	1559.9	1375.2
82.5°	136.4	139.2	272.8	414.8	701.8	485.9	392.1	593.8	767.2	679.1	591.0
85°	56.8	62.5	167.6	196.1	335.3	241.5	159.1	250.0	284.1	252.9	184.7
87.5°	5.7	8.5	51.1	36.9	39.8	48.3	22.7	48.3	39.8	39.8	28.4
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°	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0	6538.0
2.5°	6580.6	6538.0	6430.0	6305.0	6140.2	6060.7	5952.7	5878.8	5816.3	5822.0	5765.2
5°	6708.5	6600.5	6359.0	6057.8	5682.8	5415.7	5131.5	4935.5	4776.4	4742.3	4665.5
7.5°	6884.7	6714.2	6290.8	5748.1	5114.5	4634.3	4205.2	3929.6	3733.6	3671.1	3608.6
10°	7112.0	6864.8	6202.7	5358.8	4446.8	3835.9	3375.6	3159.6	3026.1	2980.6	2946.5
12.5°	7376.2	7038.1	6086.2	4884.3	3759.1	3171.0	2878.3	2770.3	2727.7	2713.5	2705.0
15°	7708.7	7254.0	5910.1	4321.7	3176.7	2764.7	2639.6	2625.4	2631.1	2625.4	2622.6
17.5°	8103.6	7489.9	5623.1	3742.1	2784.6	2557.2	2511.8	2523.1	2537.4	2534.5	2528.8
20°	8535.5	7722.9	5256.6	3227.8	2517.5	2409.5	2383.9	2395.3	2406.6	2401.0	2398.1
22.5°	9027.1	7972.9	4850.2	2827.2	2338.5	2273.1	2244.7	2247.5	2247.5	2236.2	2230.5
25°	9615.2	8248.5	4424.0	2543.0	2202.1	2150.9	2116.8	2105.5	2088.4	2054.3	2048.6
27.5°	10317.1	8541.2	4014.9	2344.1	2094.1	2045.8	2006.0	1977.6	1935.0	1878.2	1872.5
30°	11107.0	8896.4	3668.2	2219.1	2008.9	1960.6	1915.1	1872.5	1810.0	1738.9	1733.2
32.5°	12036.1	9277.1	3415.3	2136.7	1932.1	1881.0	1827.0	1775.9	1707.7	1636.6	1639.5
35°	13144.2	9737.4	3267.6	2079.9	1872.5	1804.3	1744.6	1687.8	1636.6	1574.1	1568.4
37.5°	14346.1	10226.1	3222.1	2051.5	1832.7	1727.6	1659.4	1619.6	1613.9	1577.0	1574.1
40°	15661.7	10805.8	3256.2	2034.4	1790.1	1653.7	1579.8	1571.3	1585.5	1520.1	1523.0
42.5°	17054.0	11493.4	3313.0	2014.5	1730.4	1579.8	1508.8	1508.8	1497.4	1406.5	1406.5
45°	18559.9	12286.1	3369.9	1966.2	1659.4	1505.9	1451.9	1432.1	1383.8	1295.7	1292.8
47.5°	20077.2	13093.1	3412.5	1878.2	1574.1	1443.4	1395.1	1349.7	1278.6	1199.1	1196.2
50°	21517.8	13817.6	3367.0	1747.4	1477.5	1383.8	1332.6	1270.1	1193.4	1139.4	1130.9
52.5°	22804.9	14445.6	3173.8	1594.0	1375.2	1321.2	1275.8	1210.4	1147.9	1091.1	1085.4
55°	23924.4	14954.2	2832.9	1449.1	1284.3	1267.3	1221.8	1139.4	1054.2	1005.8	1000.2
57.5°	24998.5	15340.6	2406.6	1329.8	1201.9	1207.6	1139.4	1065.5	986.0	934.8	929.1
60°	26427.7	15857.7	1974.8	1219.0	1113.8	1130.9	1057.0	1003.0	903.6	838.2	829.7
62.5°	28712.1	16661.9	1568.4	1082.6	1011.5	1017.2	986.0	920.6	801.3	724.6	718.9
65°	30524.9	16366.3	1236.0	934.8	895.0	903.6	903.6	832.5	704.7	616.6	608.1
67.5°	30320.4	14013.7	986.0	789.9	784.2	789.9	809.8	750.1	625.1	554.1	542.7
70°	27930.8	11146.7	789.9	656.4	681.9	667.7	724.6	684.8	562.6	491.6	483.0
72.5°	22790.7	8029.7	602.4	542.7	522.8	545.5	653.5	616.6	468.8	389.3	380.7
75°	13317.5	4284.8	448.9	429.0	377.9	454.6	579.6	525.7	358.0	287.0	278.5
77.5°	4335.9	1494.6	329.6	315.4	281.3	366.5	494.4	443.3	292.7	227.3	218.8
80°	1162.1	451.8	224.5	207.4	181.8	272.8	392.1	352.3	210.3	147.8	144.9
82.5°	466.0	190.4	130.7	116.5	99.4	187.5	309.7	284.1	156.3	93.8	93.8
85°	150.6	62.5	48.3	36.9	45.5	116.5	184.7	193.2	110.8	48.3	36.9
87.5°	19.9	8.5	8.5	11.4	8.5	19.9	56.8	54.0	31.3	5.7	0.0
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)