

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: P884676

Luminaire Tested: **NAV-SB5C-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884676
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-SB5C-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 615mA 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: 23414 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

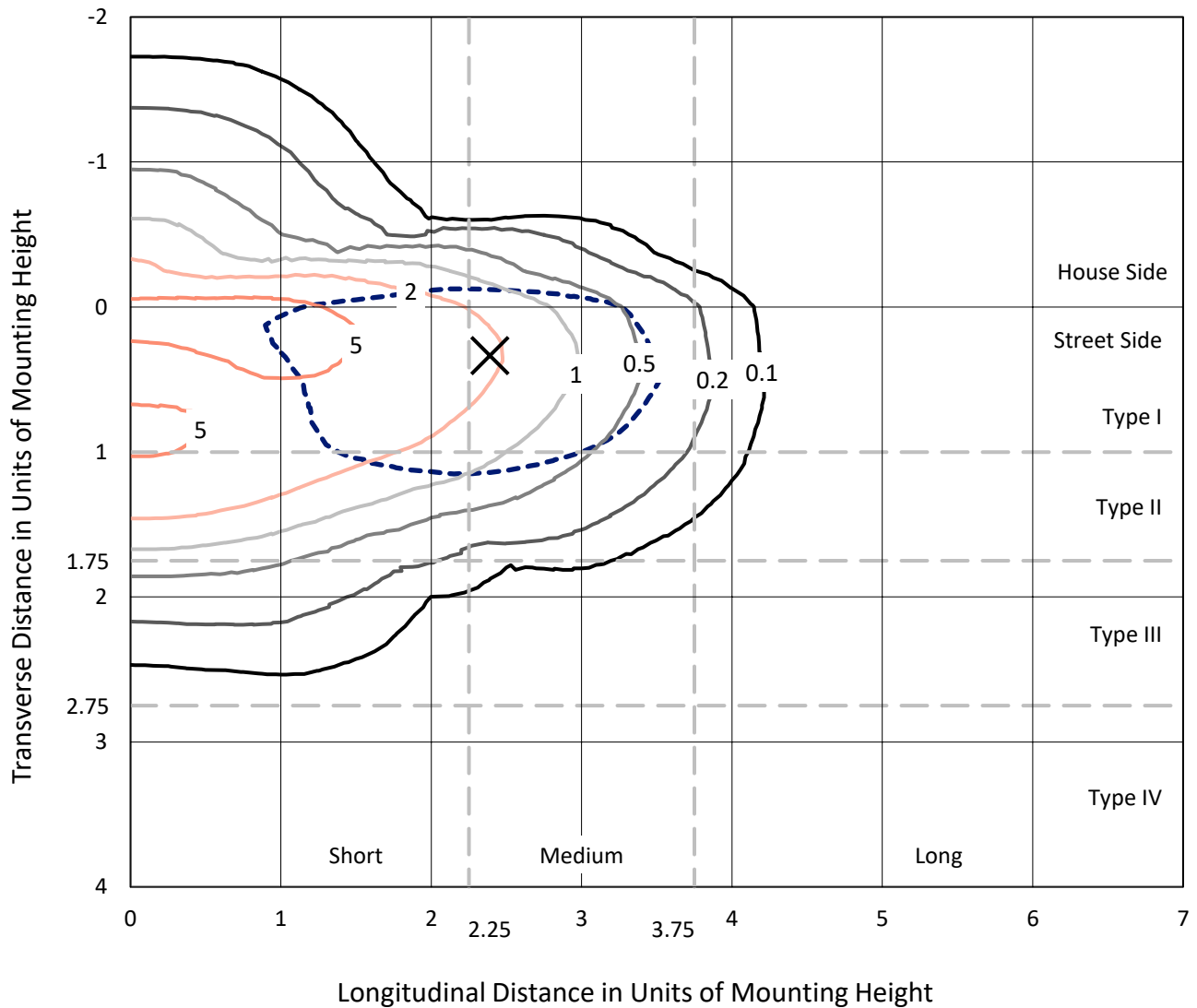
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

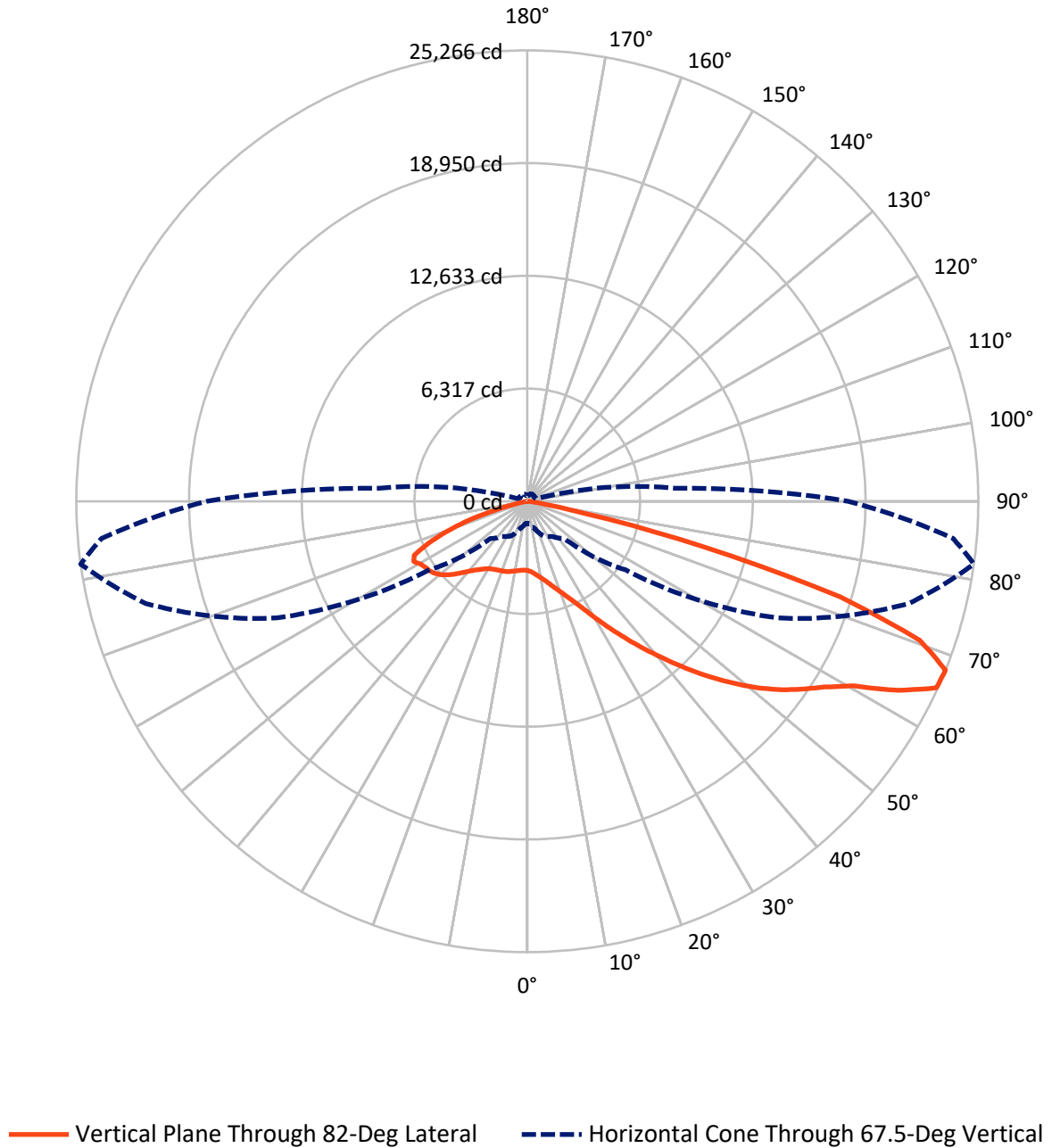
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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	4241.2	0.0	4241.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	19172.8	0.0	19172.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	23414.0	0.0	23414.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.6	1.5
10°-20°	898.0	3.8
20°-30°	1438.4	6.1
30°-40°	2543.5	10.9
40°-50°	4456.4	19.0
50°-60°	5943.6	25.4
60°-70°	5533.1	23.6
70°-80°	2123.6	9.1
80°-90°	131.9	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°	23414.0	100.0
0°-180°	23414.0	100.0

Coefficient of Utilization



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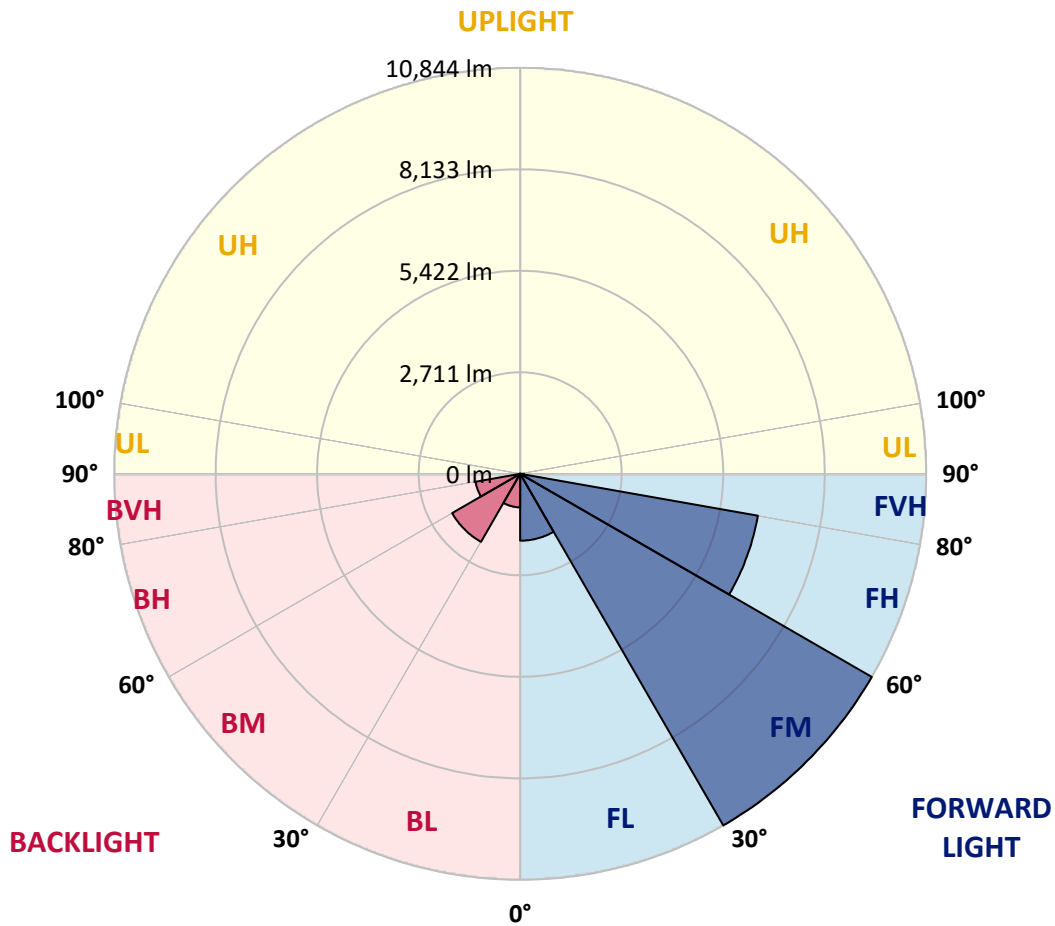
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1786.2	7.6			
FM (30°-60°)	10844.4	46.3			
FH (60°-80°)	6446.2	27.5			G3/7500
FVH (80°-90°)	95.9	0.4			G1/100
BL (0°-30°)	895.7	3.8	B2/1000		
BM (30°-60°)	2099.0	9.0	B2/2500		
BH (60°-80°)	1210.5	5.2	B3/2500		G3/2500
BVH (80°-90°)	36.0	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9
2.5°	4099.7	4123.3	4109.9	4103.1	4091.3	4074.5	4061.0	4018.8	3975.0	3946.3	3936.2
5°	4182.3	4205.9	4204.3	4211.0	4219.4	4224.5	4221.1	4173.9	4111.5	4062.7	4034.0
7.5°	4111.5	4138.5	4160.4	4194.1	4253.1	4315.5	4345.9	4335.7	4271.7	4204.3	4168.9
10°	3910.9	3939.6	3991.9	4071.1	4195.8	4330.7	4443.6	4495.9	4455.4	4381.3	4332.4
12.5°	3543.4	3572.1	3674.9	3846.9	4055.9	4290.2	4506.0	4645.9	4656.0	4581.9	4524.5
15°	3130.4	3159.1	3268.7	3484.4	3803.0	4179.0	4539.7	4804.4	4893.7	4829.7	4760.6
17.5°	2874.2	2899.5	2982.1	3155.7	3487.8	3956.5	4527.9	4973.0	5176.9	5126.4	5043.8
20°	2796.7	2818.6	2857.3	2978.7	3255.2	3725.5	4450.4	5131.4	5482.1	5453.4	5360.7
22.5°	2879.3	2899.5	2911.3	2965.2	3138.9	3573.8	4352.6	5293.3	5836.1	5839.4	5726.5
25°	3069.7	3090.0	3076.5	3110.2	3186.1	3526.6	4315.5	5483.7	6281.1	6318.2	6190.1
27.5°	3383.3	3385.0	3353.0	3351.3	3363.1	3597.4	4354.3	5687.7	6842.5	6911.6	6753.1
30°	4012.1	3986.8	3863.7	3730.6	3669.9	3809.8	4462.2	5928.8	7505.0	7628.0	7429.1
32.5°	4981.4	4944.3	4718.4	4399.8	4079.5	4152.0	4656.0	6203.6	8226.5	8449.0	8206.2
35°	6033.3	6023.2	5787.2	5313.5	4753.8	4639.2	4971.3	6564.3	9013.7	9367.7	9079.4
37.5°	7011.0	7006.0	6871.1	6313.1	5632.1	5318.5	5477.0	7036.3	9856.6	10369.0	10028.5
40°	7904.5	7919.6	7784.8	7285.8	6599.7	6190.1	6164.8	7619.6	10793.8	11459.7	11055.1
42.5°	8676.5	8693.4	8556.9	8187.7	7555.5	7154.3	7009.3	8334.3	11709.2	12631.3	12152.6
45°	9200.8	9305.3	9285.1	8990.1	8536.6	8120.3	8024.2	9231.2	12752.7	13873.7	13312.4
47.5°	9349.2	9445.2	9597.0	9637.4	9361.0	8951.3	9066.0	10311.7	13808.0	15117.8	14478.9
50°	8983.4	9072.7	9387.9	9807.7	9999.9	9873.4	10079.1	11469.8	14888.5	16358.5	15623.5
52.5°	8261.9	8352.9	8750.7	9414.9	10198.8	10596.6	11095.6	12611.1	15935.4	17533.5	16707.5
55°	7218.4	7314.5	7825.2	8577.1	9819.5	10895.0	11943.5	13750.7	16894.6	18590.4	17685.2
57.5°	5799.0	5869.8	6400.8	7452.7	8865.4	10598.3	12568.9	14994.7	17798.1	19628.9	18654.5
60°	3779.4	3841.8	4458.8	5632.1	7284.1	9607.1	12693.7	16382.1	18998.4	20979.1	19960.9
62.5°	2513.5	2555.6	2921.4	3782.8	5129.7	7703.9	11963.8	17489.6	20758.3	23329.1	22201.3
65°	1724.5	1766.7	2132.5	2732.6	3314.2	5096.0	9865.0	17343.0	22353.0	25195.2	23861.8
67.5°	1230.6	1266.0	1576.2	2142.6	2398.8	2960.2	6687.4	15468.4	22123.8	25266.0	23951.1
70°	881.6	901.9	1158.1	1668.9	1906.6	1778.5	3718.8	11830.6	19370.9	23330.8	22127.1
72.5°	617.0	623.7	804.1	1271.1	1535.7	1298.0	1770.0	7887.6	14650.8	18312.3	17154.2
75°	418.1	426.5	541.1	932.2	1232.3	991.2	937.3	4229.5	8600.7	10136.4	9086.2
77.5°	256.2	259.6	348.9	637.2	922.1	755.2	603.5	1792.0	3327.7	3267.0	2784.9
80°	145.0	145.0	222.5	396.2	628.8	487.2	423.1	762.0	1053.6	925.5	815.9
82.5°	80.9	82.6	161.8	246.1	416.4	288.3	232.6	352.3	455.2	402.9	350.6
85°	33.7	37.1	99.5	116.3	198.9	143.3	94.4	148.3	168.6	150.0	109.6
87.5°	3.4	5.1	30.3	21.9	23.6	28.7	13.5	28.7	23.6	23.6	16.9
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°	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9	3878.9
2.5°	3904.2	3878.9	3814.8	3740.7	3642.9	3595.7	3531.6	3487.8	3450.7	3454.1	3420.4
5°	3980.1	3916.0	3772.7	3594.0	3371.5	3213.0	3044.5	2928.1	2833.7	2813.5	2768.0
7.5°	4084.6	3983.4	3732.2	3410.3	3034.3	2749.5	2494.9	2331.4	2215.1	2178.0	2140.9
10°	4219.4	4072.8	3680.0	3179.3	2638.2	2275.8	2002.7	1874.6	1795.3	1768.4	1748.1
12.5°	4376.2	4175.6	3610.9	2897.8	2230.2	1881.3	1707.7	1643.6	1618.3	1609.9	1604.8
15°	4573.4	4303.7	3506.4	2564.0	1884.7	1640.2	1566.1	1557.6	1561.0	1557.6	1555.9
17.5°	4807.8	4443.6	3336.1	2220.1	1652.0	1517.2	1490.2	1496.9	1505.4	1503.7	1500.3
20°	5064.0	4581.9	3118.6	1915.0	1493.6	1429.5	1414.3	1421.1	1427.8	1424.5	1422.8
22.5°	5355.6	4730.2	2877.6	1677.3	1387.4	1348.6	1331.7	1333.4	1333.4	1326.7	1323.3
25°	5704.6	4893.7	2624.7	1508.7	1306.5	1276.1	1255.9	1249.1	1239.0	1218.8	1215.4
27.5°	6121.0	5067.4	2382.0	1390.7	1242.4	1213.7	1190.1	1173.3	1148.0	1114.3	1110.9
30°	6589.6	5278.1	2176.3	1316.6	1191.8	1163.2	1136.2	1110.9	1073.8	1031.7	1028.3
32.5°	7140.8	5504.0	2026.3	1267.7	1146.3	1116.0	1083.9	1053.6	1013.1	971.0	972.7
35°	7798.3	5777.1	1938.6	1234.0	1110.9	1070.5	1035.0	1001.3	971.0	933.9	930.5
37.5°	8511.3	6067.0	1911.6	1217.1	1087.3	1024.9	984.5	960.9	957.5	935.6	933.9
40°	9291.8	6410.9	1931.9	1207.0	1062.0	981.1	937.3	932.2	940.6	901.9	903.6
42.5°	10117.9	6818.9	1965.6	1195.2	1026.6	937.3	895.1	895.1	888.4	834.4	834.4
45°	11011.3	7289.2	1999.3	1166.5	984.5	893.4	861.4	849.6	821.0	768.7	767.0
47.5°	11911.5	7767.9	2024.6	1114.3	933.9	856.4	827.7	800.7	758.6	711.4	709.7
50°	12766.2	8197.8	1997.6	1036.7	876.6	821.0	790.6	753.5	708.0	676.0	670.9
52.5°	13529.8	8570.3	1883.0	945.7	815.9	783.9	756.9	718.1	681.0	647.3	644.0
55°	14194.0	8872.1	1680.7	859.7	762.0	751.8	724.9	676.0	625.4	596.8	593.4
57.5°	14831.2	9101.4	1427.8	788.9	713.1	716.4	676.0	632.2	585.0	554.6	551.2
60°	15679.1	9408.2	1171.6	723.2	660.8	670.9	627.1	595.1	536.1	497.3	492.2
62.5°	17034.5	9885.2	930.5	642.3	600.1	603.5	585.0	546.2	475.4	429.9	426.5
65°	18110.0	9709.9	733.3	554.6	531.0	536.1	536.1	493.9	418.1	365.8	360.8
67.5°	17988.6	8314.1	585.0	468.6	465.3	468.6	480.4	445.0	370.9	328.7	322.0
70°	16570.9	6613.2	468.6	389.4	404.6	396.2	429.9	406.3	333.8	291.6	286.6
72.5°	13521.4	4763.9	357.4	322.0	310.2	323.7	387.7	365.8	278.1	230.9	225.9
75°	7901.1	2542.1	266.3	254.5	224.2	269.7	343.9	311.9	212.4	170.3	165.2
77.5°	2572.5	886.7	195.5	187.1	166.9	217.5	293.3	263.0	173.6	134.9	129.8
80°	689.5	268.0	133.2	123.1	107.9	161.8	232.6	209.0	124.7	87.7	86.0
82.5°	276.5	112.9	77.5	69.1	59.0	111.3	183.7	168.6	92.7	55.6	55.6
85°	89.3	37.1	28.7	21.9	27.0	69.1	109.6	114.6	65.7	28.7	21.9
87.5°	11.8	5.1	5.1	6.7	5.1	11.8	33.7	32.0	18.5	3.4	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)