

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: P969496

Luminaire Tested: **NAV-SB5D-835-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969496
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35686.4 lumens
Efficiency: N/A
Efficacy: 97.8 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): 364.9
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

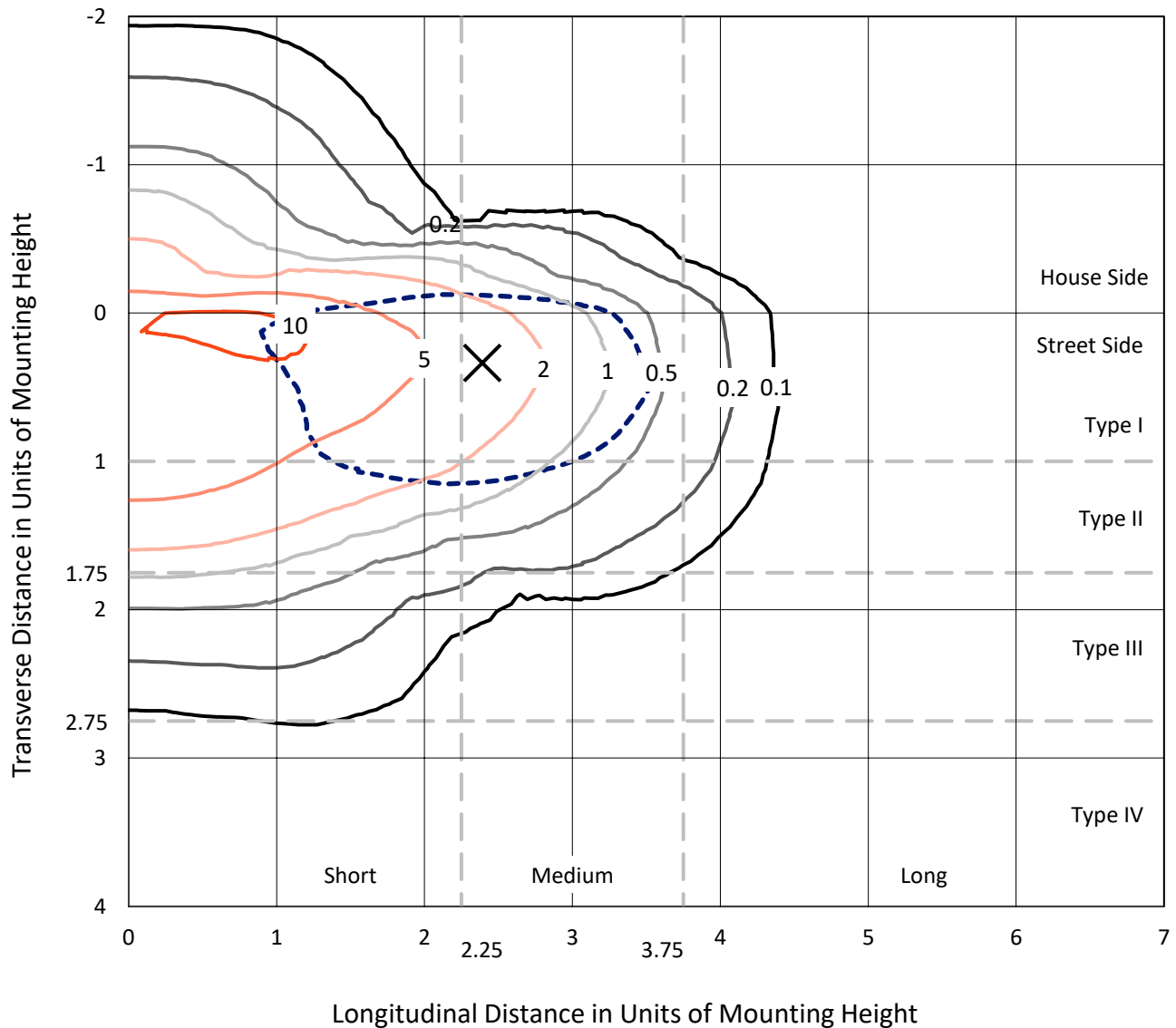


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Iso-Footcandle Lines of Horizontal Illumination

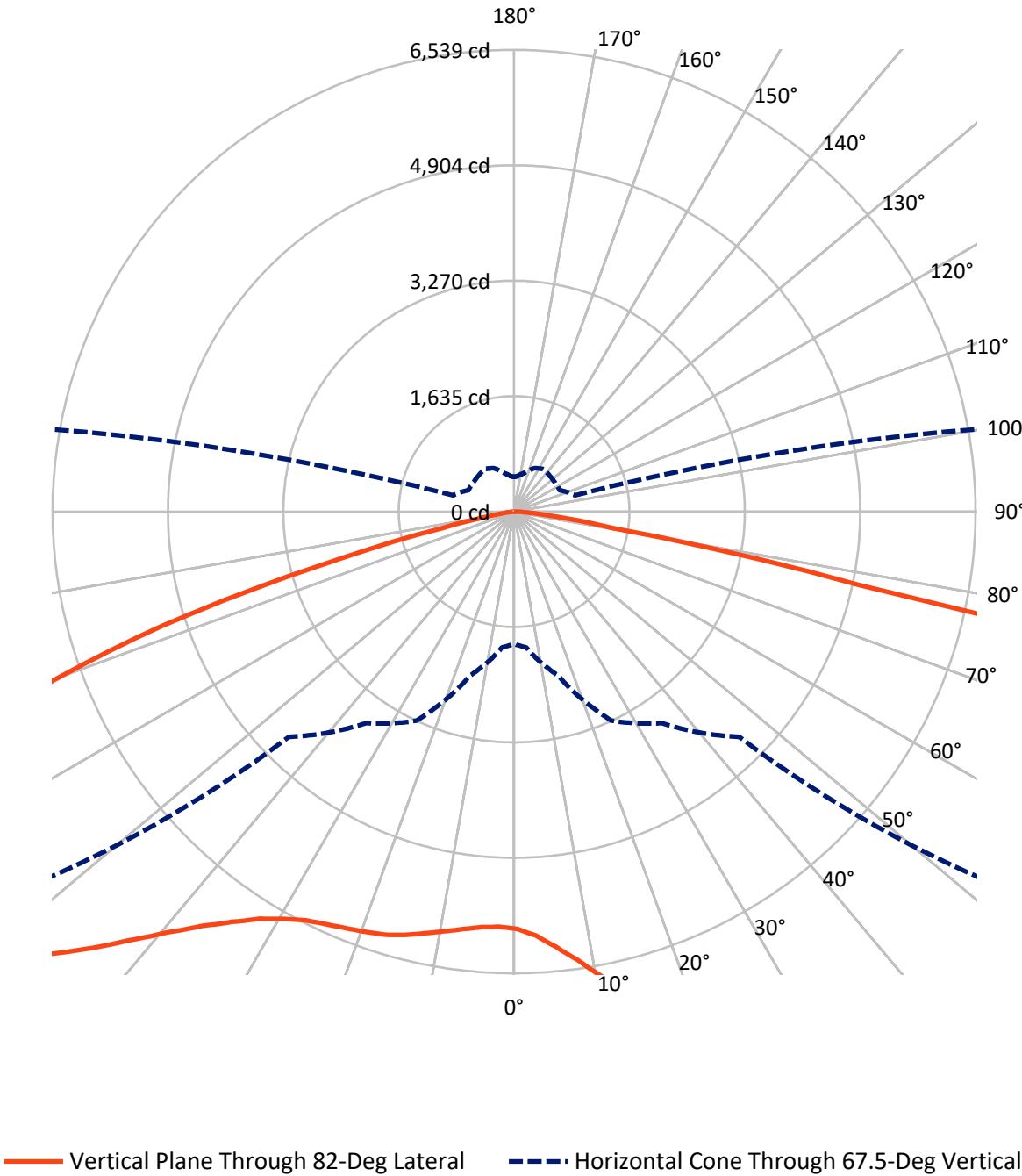
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.5 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	6464.3	0.0	6464.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	29222.1	0.0	29222.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	35686.4	0.0	35686.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.7	1.5
10°-20°	1368.7	3.8
20°-30°	2192.3	6.1
30°-40°	3876.6	10.9
40°-50°	6792.2	19.0
50°-60°	9058.9	25.4
60°-70°	8433.3	23.6
70°-80°	3236.7	9.1
80°-90°	201.0	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°	35686.4	100.0
0°-180°	35686.4	100.0

Coefficient of Utilization



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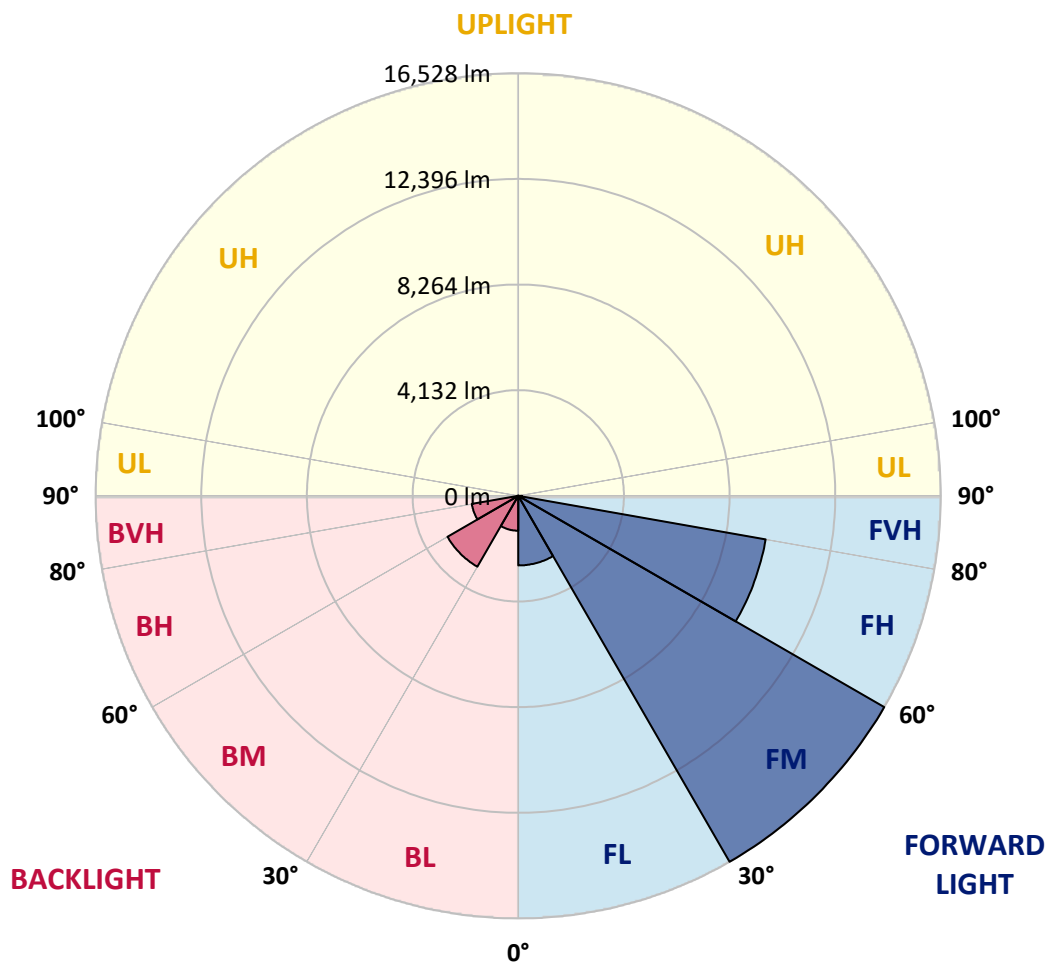
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2722.5	7.6			
FM	(30°-60°)	16528.5	46.3			
FH	(60°-80°)	9825.0	27.5			G4/12000
FVH	(80°-90°)	146.2	0.4			G2/225
BL	(0°-30°)	1365.2	3.8	B3/2500		
BM	(30°-60°)	3199.1	9.0	B3/5000		
BH	(60°-80°)	1845.0	5.2	B3/2500		G3/2500
BVH	(80°-90°)	54.9	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°	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0
2.5°	6248.6	6284.6	6264.0	6253.7	6235.8	6210.1	6189.6	6125.3	6058.5	6014.8	5999.4
5°	6374.5	6410.5	6407.9	6418.1	6431.1	6438.7	6433.6	6361.7	6266.6	6192.1	6148.4
7.5°	6266.6	6307.7	6341.1	6392.5	6482.4	6577.5	6623.8	6608.3	6510.7	6407.9	6354.0
10°	5960.9	6004.6	6084.2	6204.9	6395.1	6600.6	6772.8	6852.4	6790.7	6677.7	6603.2
12.5°	5400.7	5444.4	5601.1	5863.2	6181.8	6539.0	6867.8	7081.1	7096.5	6983.4	6896.1
15°	4771.3	4814.9	4981.9	5310.8	5796.4	6369.3	6919.2	7322.6	7458.7	7361.1	7255.8
17.5°	4380.7	4419.3	4545.2	4809.8	5316.0	6030.2	6901.2	7579.6	7890.4	7813.4	7687.4
20°	4262.6	4295.9	4355.0	4540.0	4961.4	5678.2	6783.0	7821.1	8355.5	8311.8	8170.5
22.5°	4388.4	4419.3	4437.2	4519.4	4784.1	5447.0	6634.0	8067.7	8895.1	8900.2	8728.0
25°	4678.7	4709.6	4689.1	4740.4	4856.0	5375.0	6577.5	8358.1	9573.3	9629.9	9434.6
27.5°	5156.7	5159.2	5110.4	5107.8	5125.8	5482.9	6636.6	8668.9	10428.9	10534.2	10292.7
30°	6115.0	6076.5	5888.9	5685.9	5593.4	5806.7	6801.0	9036.3	11438.7	11626.3	11323.1
32.5°	7592.4	7535.8	7191.6	6706.0	6217.8	6328.2	7096.5	9455.1	12538.3	12877.5	12507.5
35°	9195.6	9180.2	8820.5	8098.5	7245.5	7070.8	7577.0	10004.9	13738.2	14277.7	13838.4
37.5°	10685.8	10678.1	10472.6	9622.2	8584.2	8106.2	8347.8	10724.4	15022.9	15804.0	15284.9
40°	12047.5	12070.7	11865.2	11104.6	10058.9	9434.6	9396.1	11613.4	16451.5	17466.3	16849.7
42.5°	13224.3	13250.1	13041.9	12479.3	11515.8	10904.3	10683.3	12702.7	17846.6	19252.0	18522.3
45°	14023.4	14182.7	14151.9	13702.2	13011.0	12376.5	12230.0	14069.7	19437.0	21145.5	20290.0
47.5°	14249.6	14395.9	14627.2	14688.9	14267.5	13643.2	13817.8	15716.6	21045.4	23041.8	22067.9
50°	13692.0	13828.2	14308.6	14948.4	15241.2	15048.5	15362.0	17481.7	22692.4	24932.8	23812.6
52.5°	12592.3	12731.0	13337.4	14349.7	15544.4	16150.8	16911.4	19221.2	24287.9	26723.6	25464.6
55°	11001.8	11148.3	11926.8	13072.7	14966.3	16605.6	18203.7	20958.1	25749.8	28334.6	26954.8
57.5°	8838.5	8946.4	9755.7	11359.0	13512.1	16153.4	19156.9	22854.2	27127.0	29917.3	28432.2
60°	5760.4	5855.5	6795.9	8584.2	11102.1	14642.6	19347.1	24968.8	28956.4	31975.3	30423.4
62.5°	3830.8	3895.1	4452.6	5765.6	7818.5	11741.9	18234.5	26656.8	31638.8	35556.9	33838.1
65°	2628.4	2692.7	3250.2	4164.9	5051.3	7767.0	15035.7	26433.3	34069.4	38401.2	36368.8
67.5°	1875.6	1929.6	2402.3	3265.6	3656.2	4511.7	10192.5	23576.1	33719.9	38509.1	36505.1
70°	1343.8	1374.6	1765.2	2543.6	2905.9	2710.6	5667.9	18031.6	29524.2	35559.5	33725.1
72.5°	940.3	950.7	1225.6	1937.2	2340.7	1978.4	2697.8	12021.9	22330.0	27910.6	26145.5
75°	637.2	650.1	824.7	1420.9	1878.2	1510.7	1428.5	6446.4	13108.7	15449.4	13848.7
77.5°	390.5	395.6	531.9	971.2	1405.4	1151.1	919.8	2731.2	5071.9	4979.3	4244.5
80°	221.0	221.0	339.2	603.8	958.4	742.5	644.9	1161.3	1605.9	1410.6	1243.5
82.5°	123.3	125.9	246.6	375.2	634.6	439.3	354.5	537.0	693.7	614.1	534.4
85°	51.4	56.5	151.6	177.3	303.2	218.4	143.9	226.1	257.0	228.7	167.0
87.5°	5.1	7.7	46.2	33.4	36.0	43.7	20.6	43.7	36.0	36.0	25.7
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°	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0	5912.0
2.5°	5950.5	5912.0	5814.4	5701.4	5552.3	5480.4	5382.8	5316.0	5259.4	5264.6	5213.2
5°	6066.2	5968.6	5750.1	5477.8	5138.6	4897.1	4640.2	4463.0	4319.0	4288.2	4218.8
7.5°	6225.4	6071.3	5688.5	5197.8	4624.8	4190.6	3802.6	3553.4	3376.1	3319.6	3263.1
10°	6431.1	6207.5	5608.8	4845.8	4021.0	3468.6	3052.3	2857.1	2736.3	2695.2	2664.4
12.5°	6670.0	6364.2	5503.5	4416.7	3399.2	2867.3	2602.8	2505.1	2466.6	2453.7	2446.0
15°	6970.6	6559.5	5344.2	3907.9	2872.5	2500.0	2386.9	2374.1	2379.2	2374.1	2371.5
17.5°	7327.7	6772.8	5084.7	3383.8	2517.9	2312.4	2271.3	2281.5	2294.5	2291.8	2286.7
20°	7718.2	6983.4	4753.2	2918.8	2276.4	2178.8	2155.7	2165.9	2176.2	2171.1	2168.5
22.5°	8162.8	7209.5	4385.9	2556.5	2114.6	2055.4	2029.8	2032.4	2032.4	2022.0	2016.9
25°	8694.6	7458.7	4000.5	2299.6	1991.3	1944.9	1914.2	1903.8	1888.5	1857.6	1852.5
27.5°	9329.2	7723.4	3630.4	2119.7	1893.6	1849.9	1813.9	1788.2	1749.7	1698.3	1693.2
30°	10043.5	8044.6	3317.0	2006.6	1816.5	1772.8	1731.7	1693.2	1636.6	1572.5	1567.3
32.5°	10883.7	8388.9	3088.3	1932.1	1747.1	1700.9	1652.1	1605.9	1544.2	1479.9	1482.5
35°	11885.7	8805.1	2954.8	1880.8	1693.2	1631.5	1577.6	1526.2	1479.9	1423.4	1418.3
37.5°	12972.5	9247.0	2913.7	1855.0	1657.2	1562.2	1500.5	1464.5	1459.4	1426.0	1423.4
40°	14162.1	9771.1	2944.4	1839.7	1618.7	1495.4	1428.5	1420.9	1433.7	1374.6	1377.2
42.5°	15421.1	10393.0	2995.9	1821.6	1564.8	1428.5	1364.3	1364.3	1354.0	1271.8	1271.8
45°	16782.8	11109.8	3047.2	1778.0	1500.5	1361.7	1312.9	1295.0	1251.2	1171.6	1169.0
47.5°	18154.9	11839.5	3085.8	1698.3	1423.4	1305.2	1261.6	1220.5	1156.2	1084.2	1081.7
50°	19457.6	12494.6	3044.7	1580.1	1336.1	1251.2	1205.0	1148.5	1079.1	1030.3	1022.6
52.5°	20621.5	13062.5	2869.9	1441.4	1243.5	1194.7	1153.6	1094.5	1038.0	986.7	981.4
55°	21633.8	13522.4	2561.6	1310.4	1161.3	1145.9	1104.8	1030.3	953.2	909.6	904.4
57.5°	22604.9	13871.8	2176.2	1202.4	1086.8	1091.9	1030.3	963.5	891.5	845.3	840.2
60°	23897.4	14339.4	1785.7	1102.3	1007.2	1022.6	955.8	907.0	817.0	758.0	750.2
62.5°	25963.0	15066.6	1418.3	978.9	914.7	919.8	891.5	832.5	724.6	655.2	650.1
65°	27602.3	14799.4	1117.7	845.3	809.3	817.0	817.0	752.9	637.2	557.5	549.8
67.5°	27417.3	12672.0	891.5	714.3	709.1	714.3	732.3	678.3	565.3	501.0	490.8
70°	25256.5	10079.4	714.3	593.5	616.6	603.8	655.2	619.2	508.7	444.5	436.8
72.5°	20608.5	7260.9	544.7	490.8	472.7	493.3	590.9	557.5	423.9	352.0	344.3
75°	12042.4	3874.5	406.0	388.0	341.7	411.1	524.2	475.3	323.7	259.5	251.8
77.5°	3920.8	1351.5	298.1	285.2	254.4	331.5	447.1	400.8	264.7	205.5	197.8
80°	1050.8	408.6	203.0	187.6	164.4	246.6	354.5	318.6	190.1	133.6	131.0
82.5°	421.4	172.1	118.2	105.4	89.9	169.5	280.0	257.0	141.3	84.8	84.8
85°	136.2	56.5	43.7	33.4	41.1	105.4	167.0	174.8	100.2	43.7	33.4
87.5°	17.9	7.7	7.7	10.2	7.7	17.9	51.4	48.8	28.3	5.1	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)