

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: P969319

Luminaire Tested: **NAV-SB5D-735-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969319
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52723.9 lumens
Efficiency: N/A
Efficacy: 144.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

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



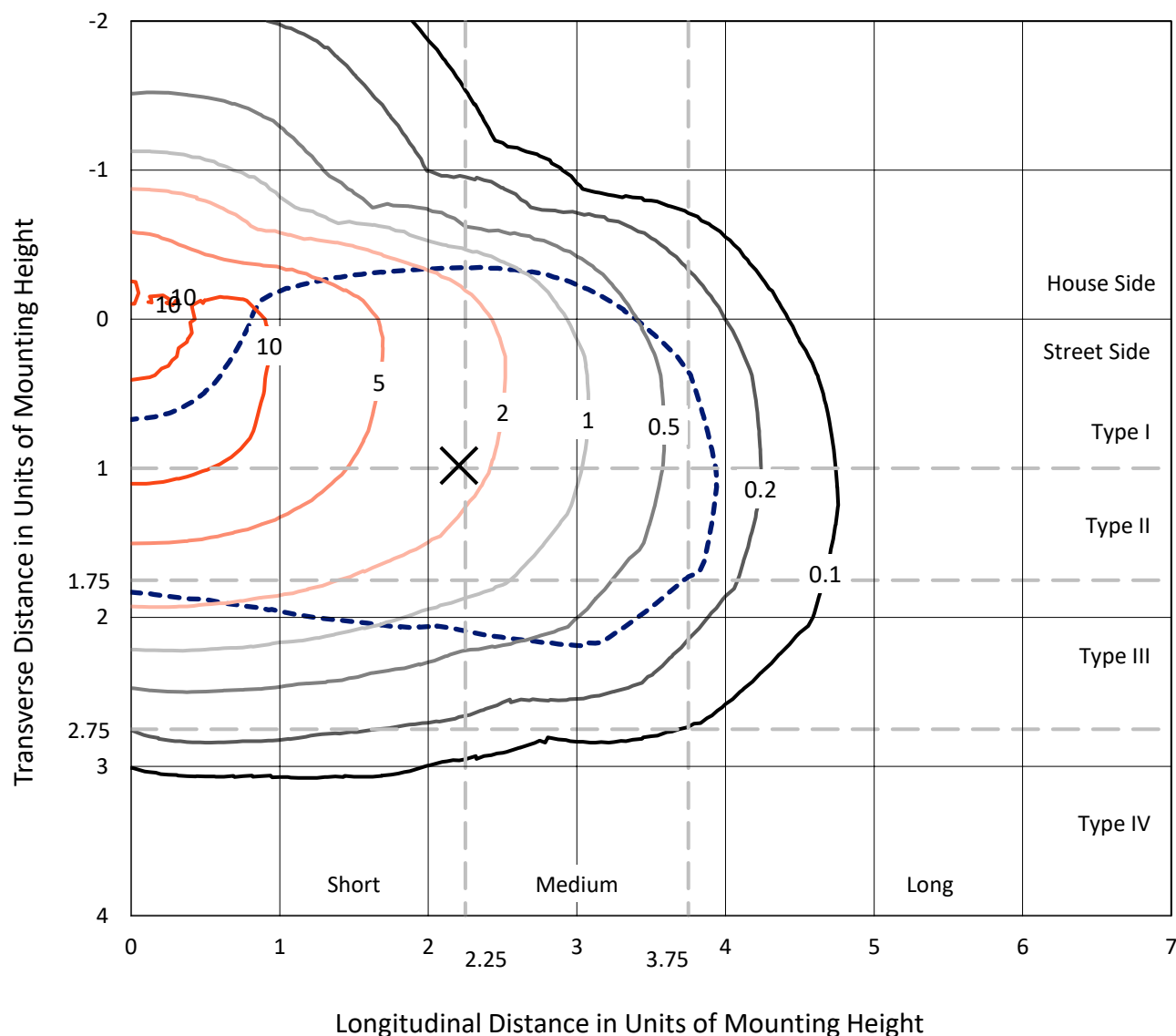
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

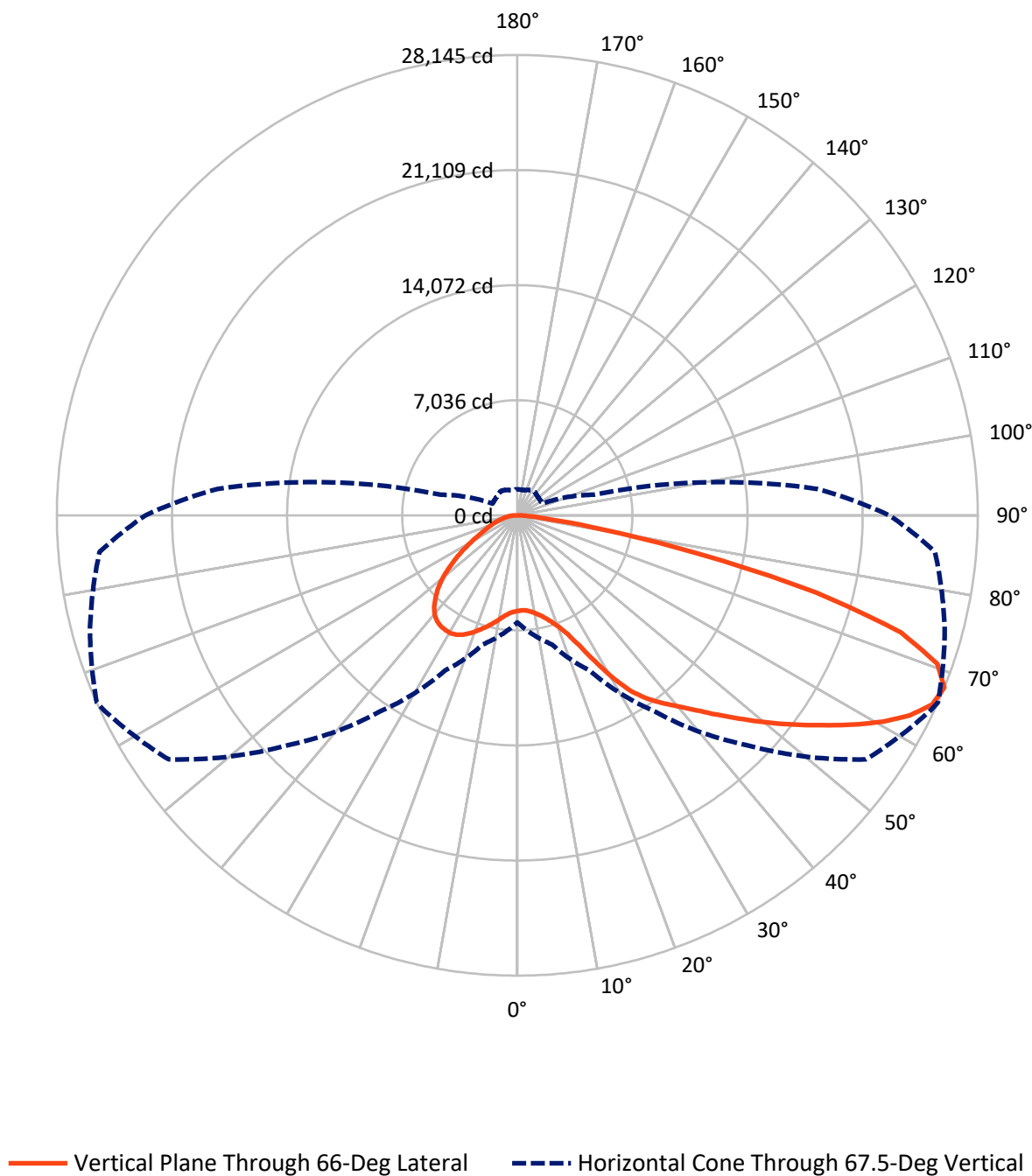
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.3 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13109.7	0.0	13109.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	39614.3	0.0	39614.3
	% Fixture	75.1	0.0	75.1
Total	Lumens	52723.9	0.0	52723.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	579.8	1.1
10°-20°	1915.5	3.6
20°-30°	3692.1	7.0
30°-40°	6473.6	12.3
40°-50°	9624.1	18.3
50°-60°	12199.5	23.1
60°-70°	11936.9	22.6
70°-80°	5694.0	10.8
80°-90°	608.5	1.2
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°	52723.9	100.0
0°-180°	52723.9	100.0

Coefficient of Utilization



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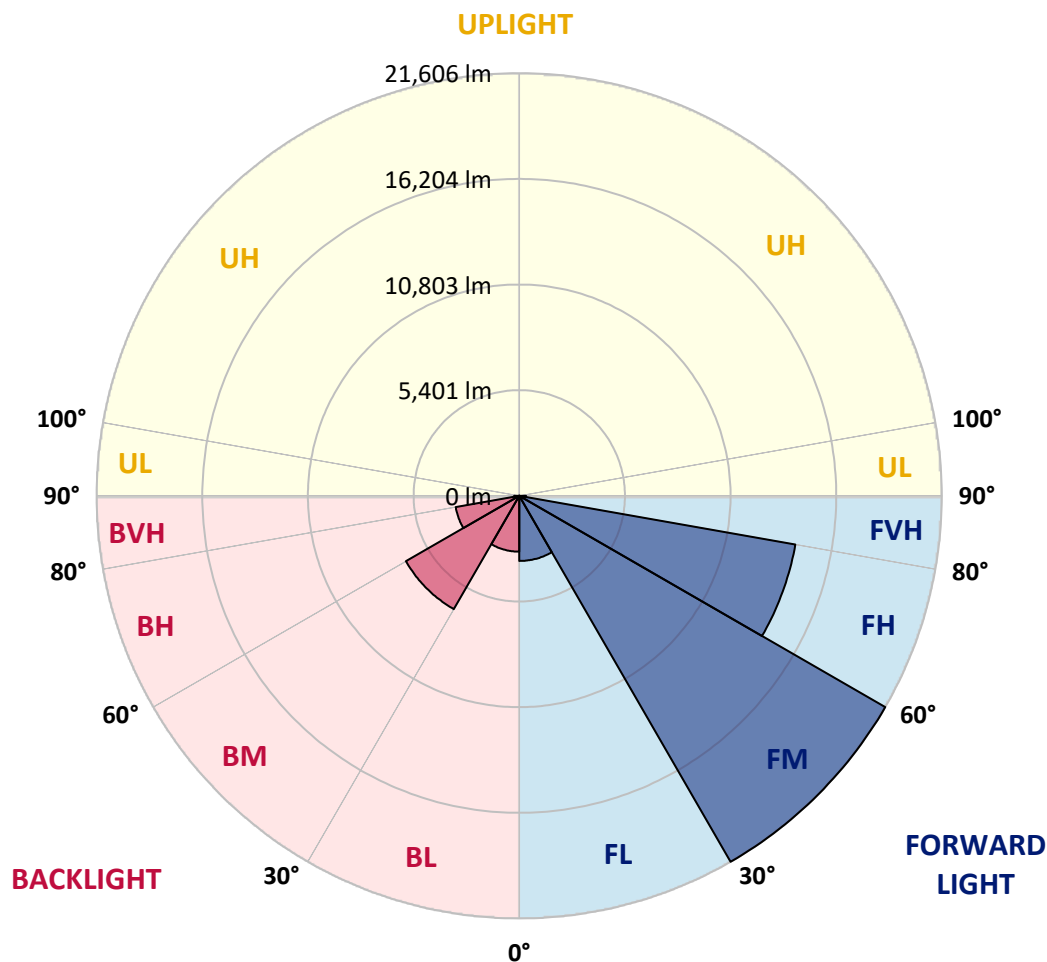
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3331.6	6.3			
FM	(30°-60°)	21605.8	41.0			
FH	(60°-80°)	14331.8	27.2			G5
FVH	(80°-90°)	345.0	0.7			G3/500
BL	(0°-30°)	2855.8	5.4	B4/5000		
BM	(30°-60°)	6691.3	12.7	B4/8500		
BH	(60°-80°)	3299.1	6.3	B4/5000		G4/5000
BVH	(80°-90°)	263.5	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8
2.5°	5786.8	5820.1	5811.7	5797.9	5795.1	5800.7	5809.0	5817.3	5814.5	5828.4	5850.6
5°	5770.2	5803.4	5800.7	5800.7	5811.7	5833.9	5847.8	5861.7	5847.8	5864.4	5894.9
7.5°	5781.3	5806.2	5817.3	5828.4	5856.1	5897.6	5930.9	5961.4	5944.7	5964.2	6002.9
10°	5922.6	5941.9	5953.1	5953.1	5972.5	6019.5	6052.7	6108.2	6094.3	6124.8	6174.7
12.5°	6180.2	6199.6	6199.6	6188.5	6202.4	6232.8	6243.9	6304.9	6280.0	6329.8	6379.7
15°	6496.0	6534.8	6504.3	6484.9	6490.5	6520.9	6518.2	6565.2	6540.3	6581.8	6626.2
17.5°	6845.1	6894.9	6845.1	6842.3	6831.2	6864.4	6867.2	6908.7	6864.4	6894.9	6925.4
20°	7257.8	7327.0	7285.5	7299.3	7274.4	7288.3	7302.1	7363.1	7293.8	7315.9	7307.6
22.5°	7839.5	7922.6	7878.3	7930.9	7914.3	7903.3	7900.5	8008.5	7900.5	7908.8	7828.4
25°	8687.2	8786.9	8709.3	8781.4	8781.4	8817.4	8859.0	8997.4	8817.4	8764.8	8557.0
27.5°	9939.3	10039.1	9886.6	9931.0	9917.1	10005.7	9961.5	10304.9	10111.0	10025.2	9606.9
30°	11446.3	11623.5	11335.5	11324.4	11310.5	11451.8	11515.5	11742.7	11546.0	11460.1	10955.9
32.5°	13075.1	13260.7	12917.2	12817.5	12764.8	12850.7	12798.0	12980.9	12845.2	12712.3	12089.0
35°	14798.1	14981.0	14654.1	14460.2	14249.7	14069.6	13881.2	13928.3	13800.9	13598.7	12953.2
37.5°	16427.0	16762.1	16415.9	16208.1	15820.4	15468.5	14942.1	14723.3	14604.2	14418.6	13767.6
40°	18086.3	18277.4	18014.3	17836.9	17415.9	16864.6	16022.5	15559.9	15399.3	15219.2	14668.0
42.5°	19307.9	19490.8	19349.4	19227.6	18897.9	18258.0	17169.4	16590.4	16357.8	16155.5	15687.3
45°	20277.5	20413.2	20324.6	20368.9	20227.7	19607.1	18357.8	17695.7	17454.7	17208.1	16839.7
47.5°	20668.1	20812.1	20953.4	21216.6	21457.6	21000.5	19634.8	18892.4	18637.6	18385.4	18022.6
50°	20623.7	20770.6	21180.6	21740.1	22488.1	22335.7	20981.1	20166.7	19931.2	19643.1	19307.9
52.5°	20269.2	20435.4	20961.8	21892.5	23083.6	23335.8	22352.3	21482.5	21260.9	20917.4	20582.2
55°	19338.4	19438.1	20227.7	21546.2	23225.0	24033.8	23695.8	22884.1	22662.5	22183.4	21817.6
57.5°	17612.6	17756.7	18906.2	20612.6	22870.3	24507.5	24875.9	24357.9	24144.6	23454.9	23072.5
60°	15360.4	15590.4	16906.2	19044.8	21967.3	24504.8	25948.0	25806.7	25629.4	24706.9	24308.1
62.5°	12811.9	13077.9	14343.8	16828.7	20388.3	23809.4	26618.3	27020.0	26928.6	25862.1	25352.4
65°	9839.6	10022.3	11282.8	13961.5	17931.1	22316.3	26695.9	27848.3	27864.9	26740.2	25898.2
67.5°	6551.4	7077.7	8171.9	10476.7	14640.3	19875.8	26014.5	27984.0	28144.7	27042.2	25623.9
70°	3196.8	3889.3	4961.3	6809.1	10476.7	16133.3	24233.3	26870.5	27227.8	26161.3	23989.5
72.5°	1326.9	1551.2	2135.8	3360.2	6014.0	10886.7	20654.3	23850.9	24513.1	23180.6	20169.4
75°	894.7	969.5	1221.6	1723.0	2739.7	5368.5	14895.1	17784.4	18850.9	17507.3	14310.5
77.5°	689.7	736.9	889.2	1205.0	1628.8	2030.5	7972.4	10717.7	11269.0	10432.3	7446.1
80°	542.9	578.9	664.8	878.1	1155.2	1085.9	2717.5	4856.0	5174.6	4340.8	2393.4
82.5°	470.9	484.8	476.4	595.6	767.3	634.4	892.0	1792.3	1977.8	1434.9	781.2
85°	340.7	379.6	396.2	368.4	407.2	321.3	365.6	634.4	698.1	623.3	440.4
87.5°	138.5	205.0	252.0	238.2	149.5	91.4	113.6	185.6	213.3	232.7	144.0
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°	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8	5847.8
2.5°	5853.4	5872.7	5886.6	5903.2	5914.2	5930.9	5964.2	5983.5	5986.3	6000.1	5997.4
5°	5905.9	5933.6	5964.2	6008.4	6058.4	6099.9	6163.5	6207.9	6224.5	6238.4	6235.6
7.5°	6019.5	6058.4	6113.7	6191.3	6263.3	6318.7	6396.3	6448.9	6501.6	6520.9	6523.7
10°	6188.5	6243.9	6324.2	6429.5	6507.1	6579.1	6659.4	6703.8	6756.4	6778.5	6789.6
12.5°	6399.1	6457.2	6562.5	6709.3	6781.3	6831.2	6858.9	6847.8	6858.9	6878.3	6883.8
15°	6640.1	6703.8	6822.9	6980.8	7030.7	6986.3	6925.4	6870.0	6861.7	6867.2	6886.6
17.5°	6925.4	6972.5	7110.9	7244.0	7207.9	7025.1	6892.1	6803.4	6759.2	6745.3	6764.7
20°	7324.2	7324.2	7437.8	7520.9	7280.0	6969.7	6761.9	6617.9	6526.5	6487.7	6479.3
22.5°	7809.1	7764.7	7836.7	7778.6	7266.1	6814.6	6526.5	6277.2	6138.6	6083.3	6075.0
25°	8424.1	8371.4	8352.0	7991.9	7166.4	6568.0	6099.9	5797.9	5676.0	5645.6	5651.1
27.5°	9352.0	9219.1	8967.0	8108.3	6983.5	6180.2	5601.2	5321.5	5252.2	5255.0	5263.3
30°	10587.5	10321.5	9703.9	8127.6	6684.3	5631.8	5091.5	4892.1	4858.8	4872.6	4919.8
32.5°	11731.5	11479.5	10457.4	8039.0	6224.5	5094.4	4634.4	4501.5	4451.7	4468.3	4490.4
35°	12629.1	12559.8	11155.4	7914.3	5659.4	4590.2	4224.4	4110.9	4013.9	3991.8	4008.4
37.5°	13476.8	13449.0	11679.0	7739.8	5099.9	4232.7	3894.8	3745.2	3604.0	3526.4	3529.2
40°	14407.5	14379.8	12022.4	7471.1	4604.0	3922.6	3598.5	3401.8	3227.2	3086.0	3099.8
42.5°	15454.6	15291.3	12185.9	7086.0	4182.9	3659.4	3357.4	3091.5	2861.6	2731.3	2739.7
45°	16598.7	16230.3	12183.2	6595.8	3828.4	3418.4	3099.8	2723.0	2509.7	2387.8	2382.3
47.5°	17812.0	17127.9	12033.5	6052.7	3484.9	3152.4	2700.9	2412.8	2271.5	2196.7	2180.1
50°	19064.2	17967.2	11778.7	5429.5	3133.0	2850.5	2451.6	2254.9	2146.9	2077.6	2052.7
52.5°	20241.5	18729.0	11471.2	4723.1	2775.7	2556.9	2340.8	2188.4	2074.8	1997.3	1964.0
55°	21335.7	19385.5	11036.3	4000.1	2484.8	2360.2	2288.1	2160.7	2030.5	1939.1	1903.1
57.5°	22308.0	19812.1	10285.6	3321.4	2277.0	2224.5	2232.8	2113.7	1964.0	1886.5	1836.6
60°	23116.9	20125.2	9174.8	2692.6	2108.1	2091.5	2146.9	2025.0	1850.4	1761.8	1723.0
62.5°	23601.6	20119.6	7811.8	2205.1	1964.0	1969.5	2033.3	1914.2	1736.9	1653.7	1628.8
65°	23560.1	19626.5	6315.9	1886.5	1825.5	1831.1	1914.2	1792.3	1642.7	1592.8	1590.1
67.5°	22726.3	18424.3	4845.0	1678.7	1673.2	1698.1	1795.1	1709.2	1584.5	1579.0	1587.3
70°	20468.6	15928.4	3490.4	1512.5	1515.3	1551.2	1678.7	1656.5	1554.0	1565.2	1562.4
72.5°	16413.1	12144.3	2343.6	1337.9	1340.8	1398.9	1567.9	1615.0	1523.6	1670.4	1692.6
75°	10931.0	7573.6	1507.0	1152.4	1155.2	1229.9	1471.0	1534.6	1440.4	1664.9	1678.7
77.5°	5252.2	3404.5	1091.4	969.5	969.5	1038.8	1271.5	1374.0	1227.1	1293.7	1185.6
80°	1814.5	1279.8	858.7	781.2	764.5	811.7	1072.0	1191.2	1058.2	975.1	914.2
82.5°	714.7	664.8	689.7	606.7	551.2	581.7	833.8	983.4	778.4	703.7	700.9
85°	410.0	432.1	487.6	401.7	318.6	357.3	612.2	706.4	587.2	518.0	529.1
87.5°	110.8	152.3	224.4	207.8	144.0	152.3	290.9	390.6	337.9	260.3	268.8
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)