

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: P964197

Luminaire Tested: **NAV-SB3B-830-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964197
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-830-U-T2R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15849.6 lumens
Efficiency: N/A
Efficacy: 145.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

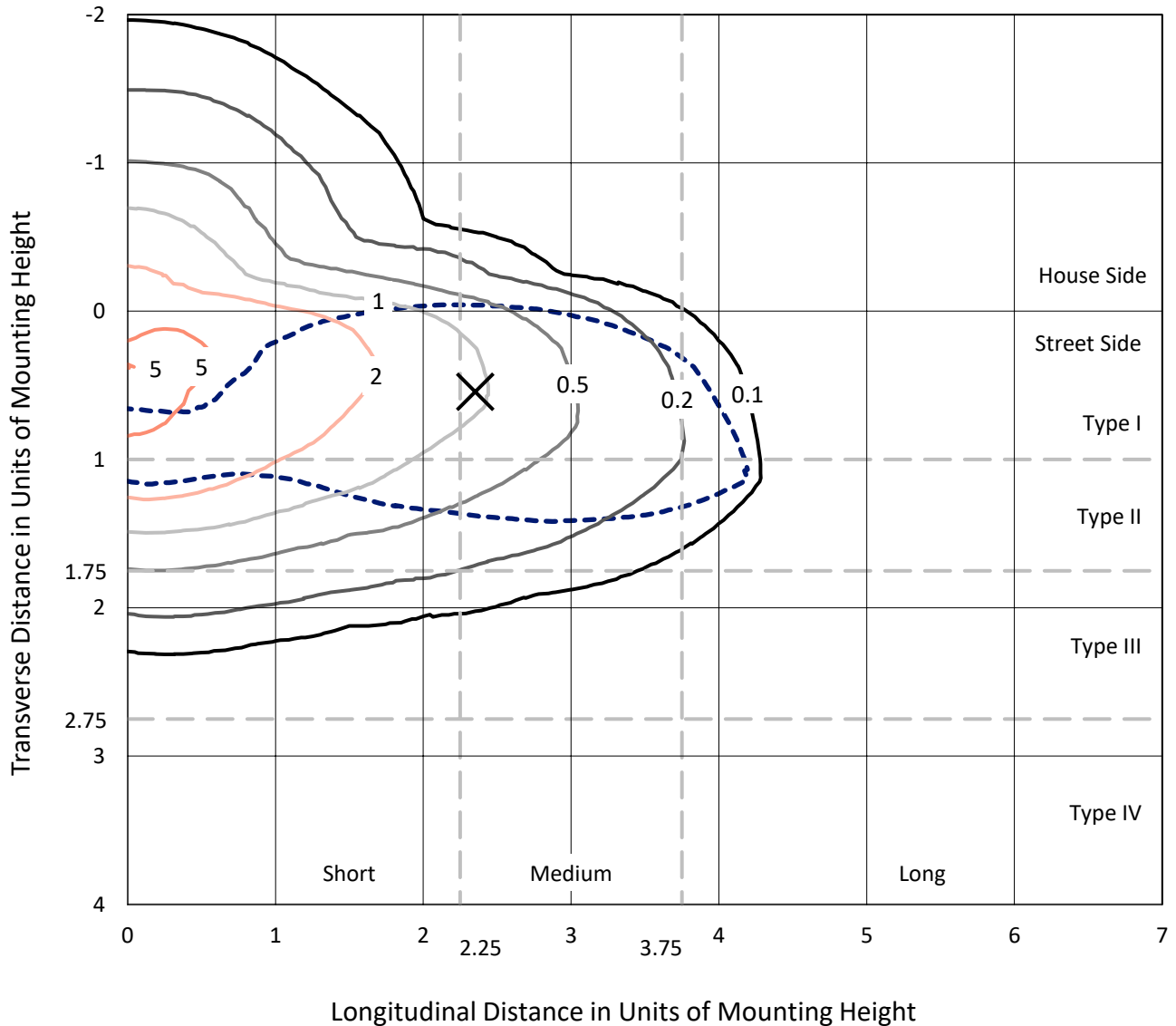
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

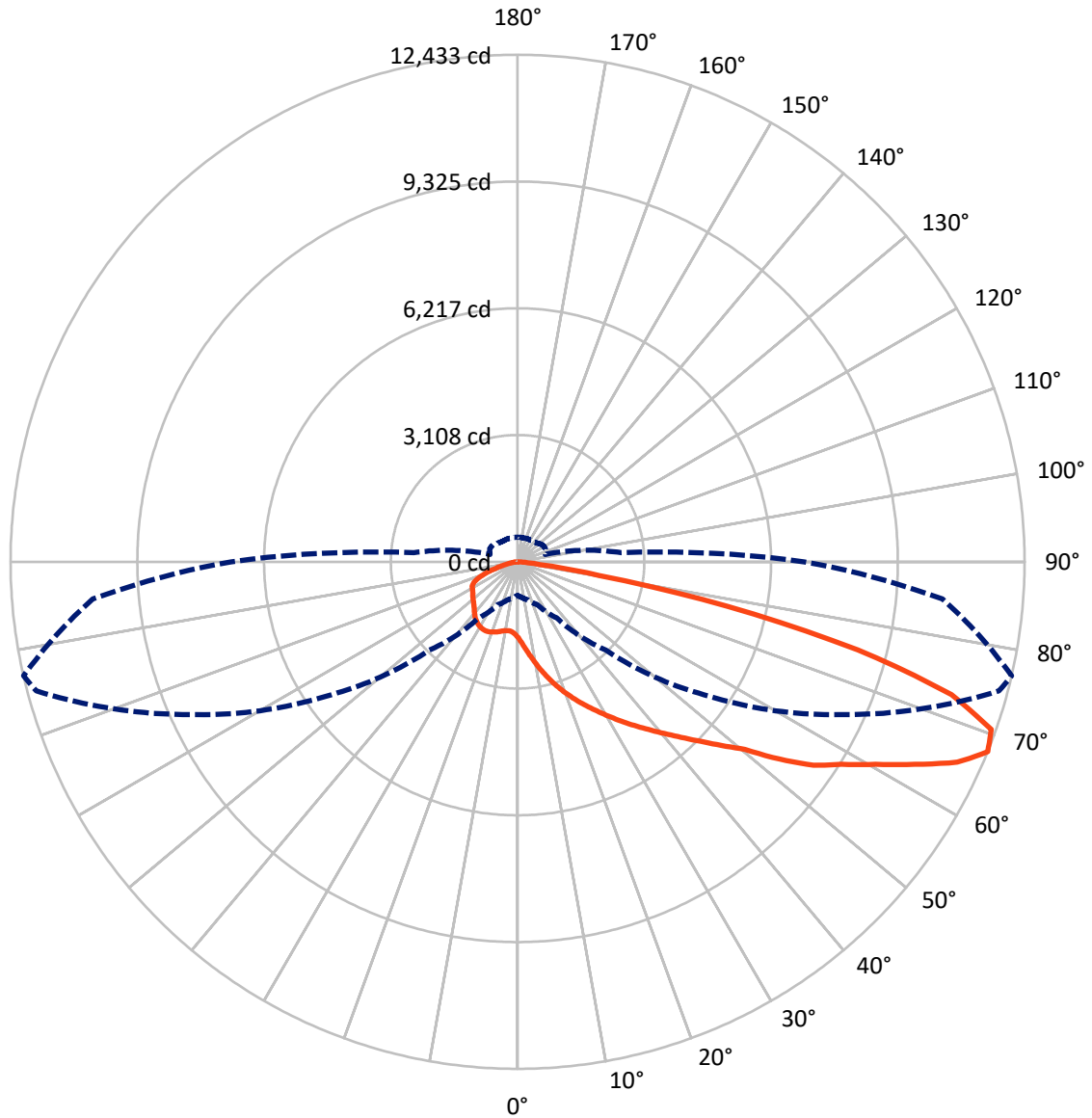
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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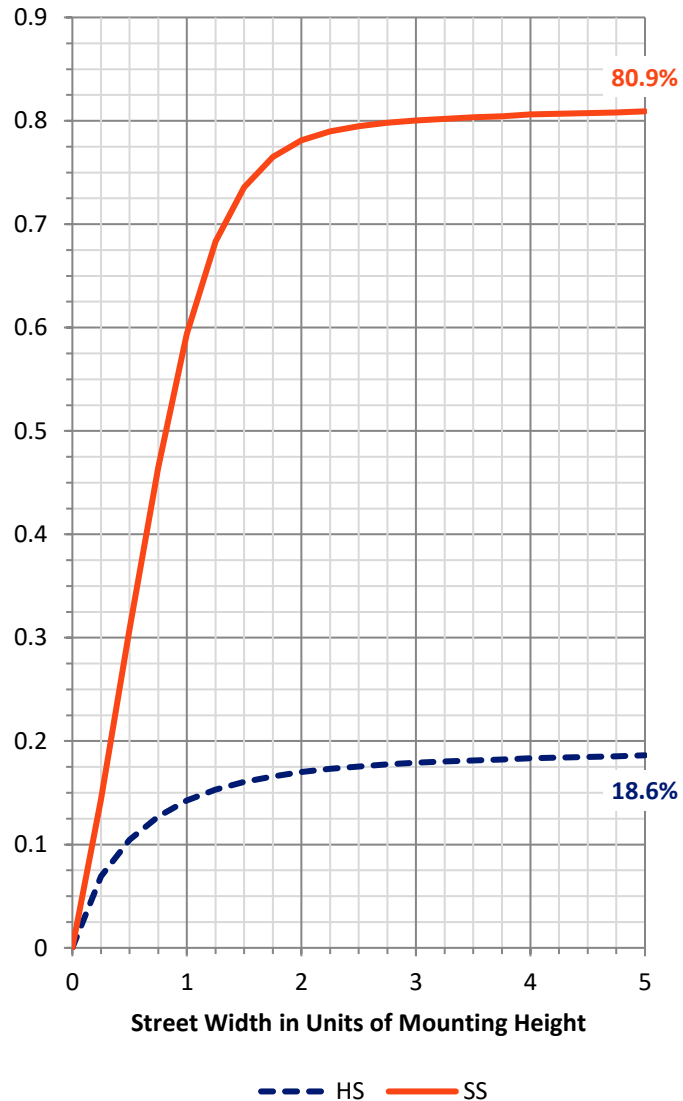
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2998.1	0.0	2998.1
	% Fixture	18.9	0.0	18.9
Street Side	Lumens	12851.5	0.0	12851.5
	% Fixture	81.1	0.0	81.1
Total	Lumens	15849.6	0.0	15849.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.3	1.3
10°-20°	716.1	4.5
20°-30°	1352.1	8.5
30°-40°	2178.2	13.7
40°-50°	2979.4	18.8
50°-60°	3360.7	21.2
60°-70°	3136.8	19.8
70°-80°	1719.5	10.8
80°-90°	207.4	1.3
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°	15849.6	100.0
0°-180°	15849.6	100.0

Coefficient of Utilization

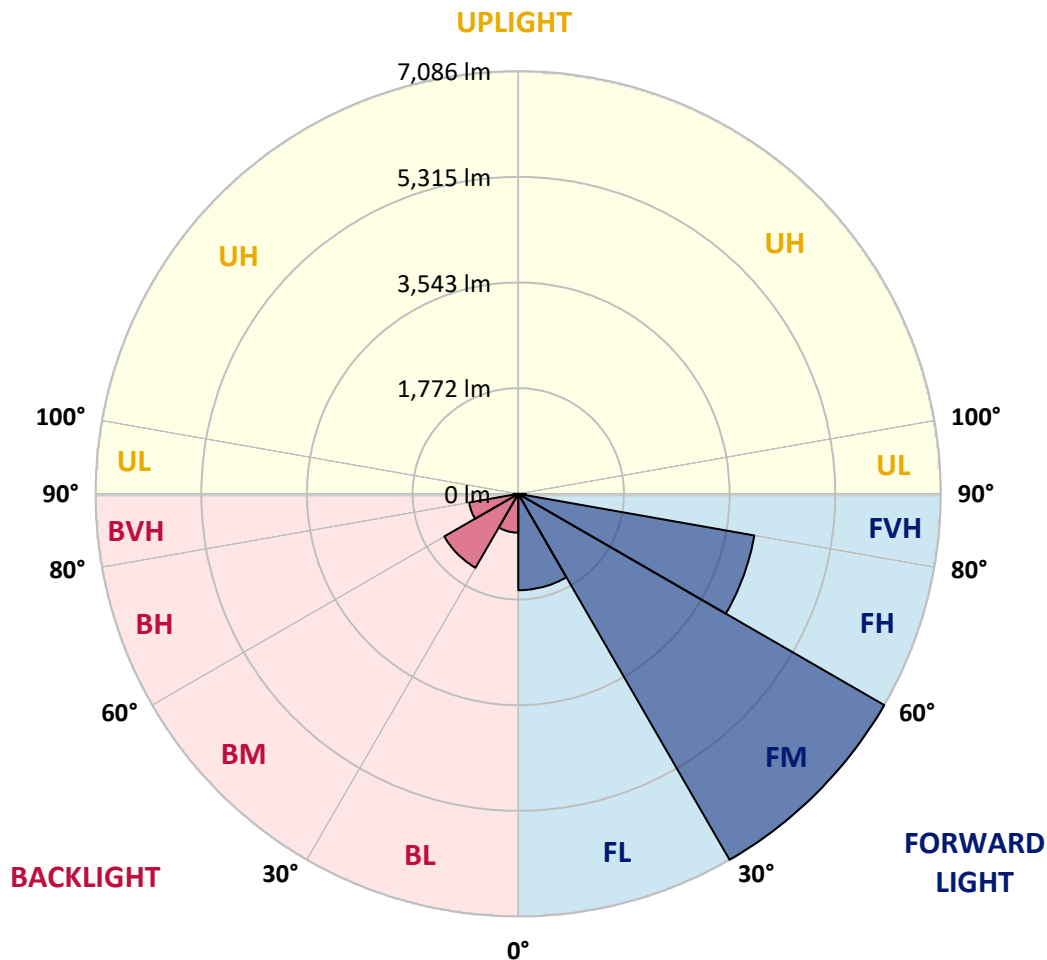


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1615.7	10.2			
FM (30°-60°)	7086.2	44.7			
FH (60°-80°)	4019.9	25.4			G2/5000
FVH (80°-90°)	129.7	0.8			G2/225
BL (0°-30°)	651.9	4.1	B2/1000		
BM (30°-60°)	1432.1	9.0	B2/2500		
BH (60°-80°)	836.4	5.3	B2/1000		G2/1000
BVH (80°-90°)	77.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7
2.5°	2328.5	2344.8	2324.4	2324.4	2255.6	2219.6	2150.9	2098.6	2004.5	1988.1	1925.9
5°	2752.2	2772.7	2744.0	2731.8	2650.8	2576.3	2461.0	2347.2	2179.6	2162.3	2015.9
7.5°	3080.3	3106.5	3081.1	3068.0	2996.1	2912.6	2777.6	2618.9	2382.4	2348.9	2137.0
10°	3347.9	3352.0	3343.8	3348.7	3292.2	3223.5	3085.2	2900.3	2604.9	2559.1	2283.5
12.5°	3499.2	3518.0	3534.4	3563.8	3554.0	3511.4	3387.1	3166.2	2840.6	2781.7	2443.0
15°	3570.4	3603.1	3640.0	3707.8	3762.7	3773.3	3678.4	3451.8	3080.3	3009.1	2604.1
17.5°	3595.8	3626.9	3685.0	3783.1	3900.9	3980.3	3937.7	3729.2	3317.6	3235.7	2773.5
20°	3724.2	3733.2	3768.4	3861.7	3989.3	4121.0	4152.9	3995.9	3552.3	3460.0	2948.6
22.5°	3999.1	3981.1	3990.9	4033.5	4125.1	4252.7	4325.5	4231.4	3793.7	3687.4	3125.3
25°	4453.2	4400.8	4348.5	4299.4	4346.0	4418.0	4500.7	4467.1	4046.6	3911.6	3303.7
27.5°	5026.7	4962.8	4847.5	4686.3	4629.9	4655.2	4692.0	4685.5	4280.5	4143.9	3487.8
30°	5591.2	5516.8	5379.3	5146.1	4997.3	4930.1	4902.4	4883.5	4535.0	4389.4	3673.5
32.5°	6042.0	5983.1	5848.1	5587.2	5371.1	5256.6	5164.2	5097.0	4800.9	4655.2	3869.8
35°	6436.4	6381.5	6226.9	5942.2	5707.4	5585.5	5464.4	5321.2	5077.4	4930.1	4080.9
37.5°	6796.4	6741.5	6529.7	6233.4	5997.0	5912.7	5804.8	5561.8	5354.8	5215.7	4304.3
40°	7023.8	7011.5	6813.5	6478.1	6232.6	6190.9	6154.9	5840.8	5662.4	5533.2	4549.7
42.5°	7081.8	7108.9	6951.8	6676.0	6442.1	6408.5	6492.9	6156.6	6007.6	5884.1	4827.9
45°	6942.0	7019.7	6916.6	6729.2	6591.0	6573.0	6792.3	6501.8	6389.7	6276.8	5163.3
47.5°	6587.7	6719.5	6676.8	6650.7	6631.0	6708.8	7055.7	6868.3	6822.5	6724.3	5546.2
50°	5872.6	6122.2	6196.6	6361.9	6551.7	6814.3	7295.4	7268.4	7328.1	7229.1	6012.5
52.5°	4636.5	4980.1	5412.0	5826.0	6308.0	6779.1	7558.9	7842.8	8094.7	8040.7	6753.8
55°	3827.2	3981.9	4314.1	5073.3	5835.0	6631.0	7677.5	8306.6	8855.6	8807.3	7315.8
57.5°	3205.5	3343.8	3548.3	4182.4	5120.0	6294.8	7751.2	8589.7	9376.8	9371.9	7870.6
60°	2538.7	2685.2	2894.6	3343.8	4284.6	5714.0	7734.8	8912.1	10041.9	10082.8	8547.2
62.5°	1786.1	1947.2	2179.6	2598.5	3431.3	4961.2	7400.9	9145.3	10824.9	10936.1	9361.2
65°	1174.0	1280.4	1455.5	1817.1	2556.7	3993.4	6763.7	9175.5	11662.7	11850.8	10125.4
67.5°	823.1	864.0	967.1	1163.4	1685.4	3062.3	5748.3	8862.2	12221.5	12433.4	10456.7
70°	642.3	662.7	715.0	793.6	1058.7	2059.2	4404.9	8047.3	12102.1	12323.0	10110.7
72.5°	554.7	574.3	594.0	603.8	710.1	1271.4	2983.8	6728.4	10977.0	11126.8	8791.0
75°	503.2	508.1	524.4	521.1	541.6	824.7	1722.2	4902.4	8660.9	8609.4	6489.6
77.5°	423.0	429.6	456.5	452.4	481.0	563.8	894.2	3163.8	5615.0	5264.8	3612.1
80°	358.3	361.6	391.0	386.1	418.1	408.3	456.5	1612.5	2381.6	2017.5	1041.5
82.5°	124.3	153.9	298.6	307.6	319.1	247.1	263.4	657.7	727.3	557.2	218.4
85°	60.6	64.7	152.2	216.0	215.1	124.3	128.4	234.8	229.1	180.0	72.8
87.5°	9.8	12.3	18.0	84.3	67.1	32.7	44.2	45.8	47.5	40.9	16.4
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°	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7	1859.7
2.5°	1880.1	1839.2	1753.3	1673.9	1611.7	1552.1	1518.4	1489.8	1473.4	1470.3	1470.3
5°	1930.8	1846.5	1690.3	1558.6	1472.6	1408.9	1375.3	1354.0	1343.4	1336.8	1336.0
7.5°	2003.7	1880.1	1657.5	1507.9	1417.9	1372.1	1354.8	1351.6	1350.7	1351.6	1354.0
10°	2104.2	1934.9	1654.2	1495.6	1420.3	1394.9	1394.1	1394.9	1398.2	1399.0	1399.8
12.5°	2213.1	1991.4	1667.4	1506.2	1451.4	1437.5	1435.0	1434.2	1436.6	1438.3	1439.1
15°	2331.7	2065.8	1689.5	1529.1	1485.7	1471.0	1468.6	1463.7	1462.9	1462.1	1461.2
17.5°	2453.6	2139.5	1714.0	1553.7	1507.9	1487.4	1478.4	1467.0	1458.0	1455.5	1458.0
20°	2577.2	2212.3	1731.2	1565.9	1509.5	1480.8	1462.9	1443.2	1427.6	1418.7	1422.0
22.5°	2708.9	2288.3	1741.9	1562.6	1494.8	1455.5	1422.8	1399.8	1376.2	1360.6	1361.4
25°	2837.3	2354.6	1741.1	1545.5	1466.2	1416.2	1374.5	1345.0	1312.3	1295.9	1295.9
27.5°	2960.9	2414.4	1720.6	1515.3	1425.3	1369.6	1319.7	1284.5	1252.6	1237.1	1236.3
30°	3088.5	2464.3	1688.7	1471.0	1377.0	1315.6	1260.8	1230.5	1201.8	1187.2	1186.3
32.5°	3215.3	2510.1	1643.7	1416.2	1321.3	1262.4	1208.4	1180.6	1163.4	1163.4	1164.2
35°	3349.5	2542.0	1583.9	1352.4	1262.4	1205.9	1163.4	1147.1	1145.4	1135.6	1133.1
37.5°	3491.0	2562.4	1511.2	1287.0	1204.3	1151.2	1138.1	1118.4	1102.1	1080.8	1077.5
40°	3640.0	2582.9	1423.6	1219.0	1143.0	1113.5	1107.8	1081.6	1034.9	982.6	975.2
42.5°	3820.8	2596.8	1332.8	1151.2	1078.3	1068.5	1076.7	1031.7	957.2	918.0	918.8
45°	4030.2	2619.7	1249.3	1084.0	1012.1	1012.1	1046.4	987.5	926.2	901.6	905.7
47.5°	4301.8	2672.9	1171.6	1010.4	950.7	967.1	979.3	934.3	900.0	869.7	868.9
50°	4694.5	2800.5	1091.4	935.9	904.0	936.7	919.6	893.4	853.3	828.8	826.4
52.5°	5182.1	2875.7	1020.2	868.9	864.0	896.7	872.2	847.6	817.3	784.6	778.1
55°	5514.3	2889.7	960.5	819.8	837.0	833.7	824.7	802.6	786.3	742.9	743.7
57.5°	5885.8	2917.6	911.4	790.4	819.8	783.8	780.5	761.7	740.5	710.9	701.2
60°	6330.0	2960.9	868.9	778.9	805.0	751.0	734.7	727.3	706.0	691.4	695.5
62.5°	6814.3	3000.2	825.5	780.5	787.9	719.1	694.6	692.2	679.1	674.1	674.1
65°	7144.9	2893.0	771.5	778.9	760.9	686.4	655.4	654.6	643.9	642.3	641.4
67.5°	7029.6	2553.5	698.7	755.9	733.1	653.7	619.3	616.0	602.2	603.0	603.0
70°	6451.9	2069.1	598.1	699.6	698.7	624.2	581.7	571.0	552.3	555.6	558.8
72.5°	5368.6	1533.2	463.1	605.5	643.9	597.3	538.3	521.1	497.4	500.7	499.9
75°	3877.2	1042.3	337.1	460.6	560.5	565.4	495.8	466.4	437.7	442.6	444.2
77.5°	1984.0	590.7	247.9	317.4	440.1	513.8	457.4	418.1	411.5	457.4	450.8
80°	647.2	296.1	171.8	222.5	288.8	420.6	400.9	355.9	354.2	364.9	313.3
82.5°	193.1	125.2	110.5	146.5	159.5	322.4	346.0	269.2	231.5	243.8	251.9
85°	66.3	60.6	63.0	72.8	76.1	189.0	242.2	178.4	168.5	185.7	183.3
87.5°	15.6	21.3	18.0	16.4	16.4	45.8	94.1	74.4	103.1	68.7	66.3
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)