

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: P965241

Luminaire Tested: **NAV-SB3D-830-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965241
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27483.3 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 218.1
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



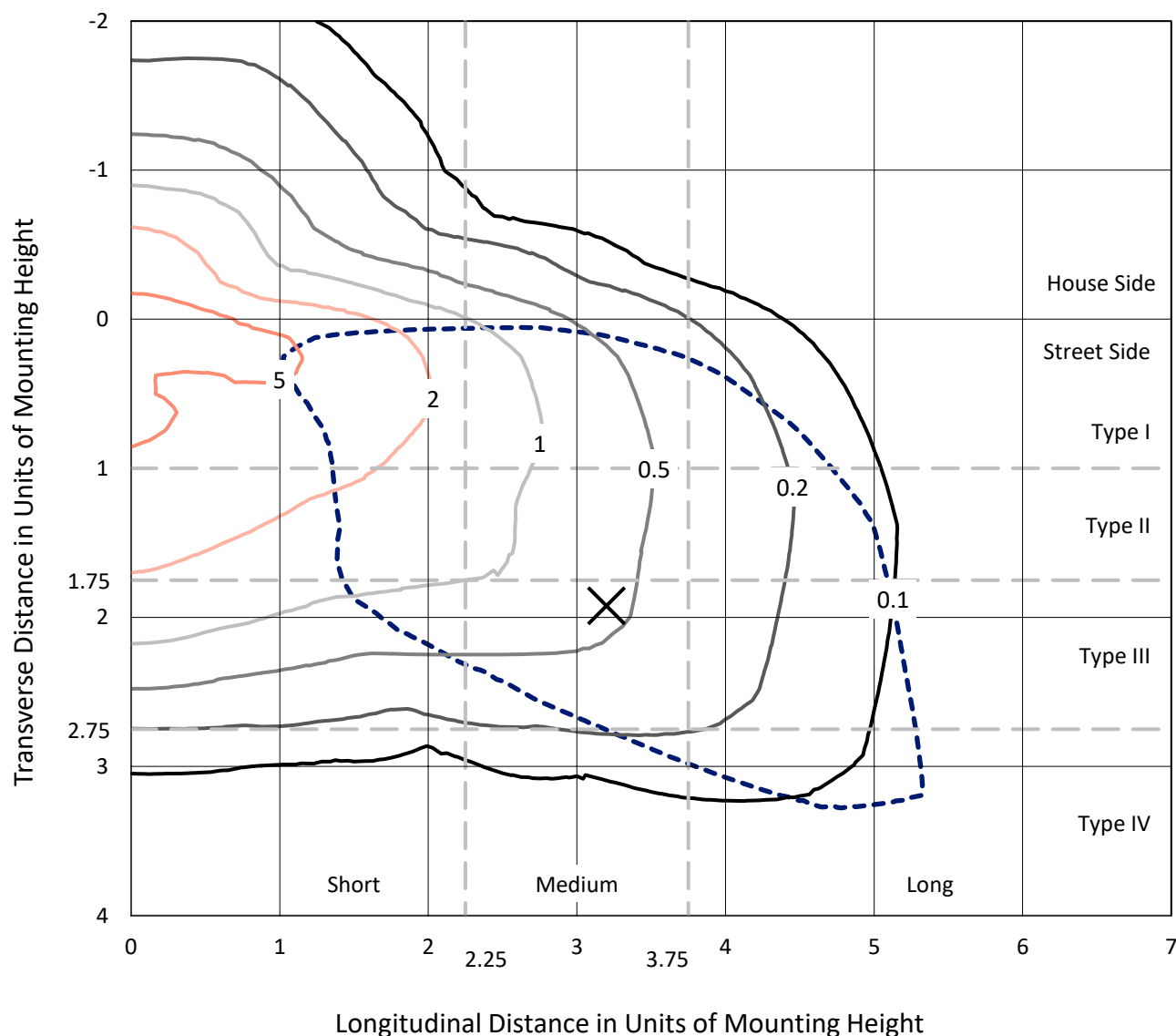
REPORT NUMBER: P965241

CATALOG NUMBER: NAV-SB3D-830-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

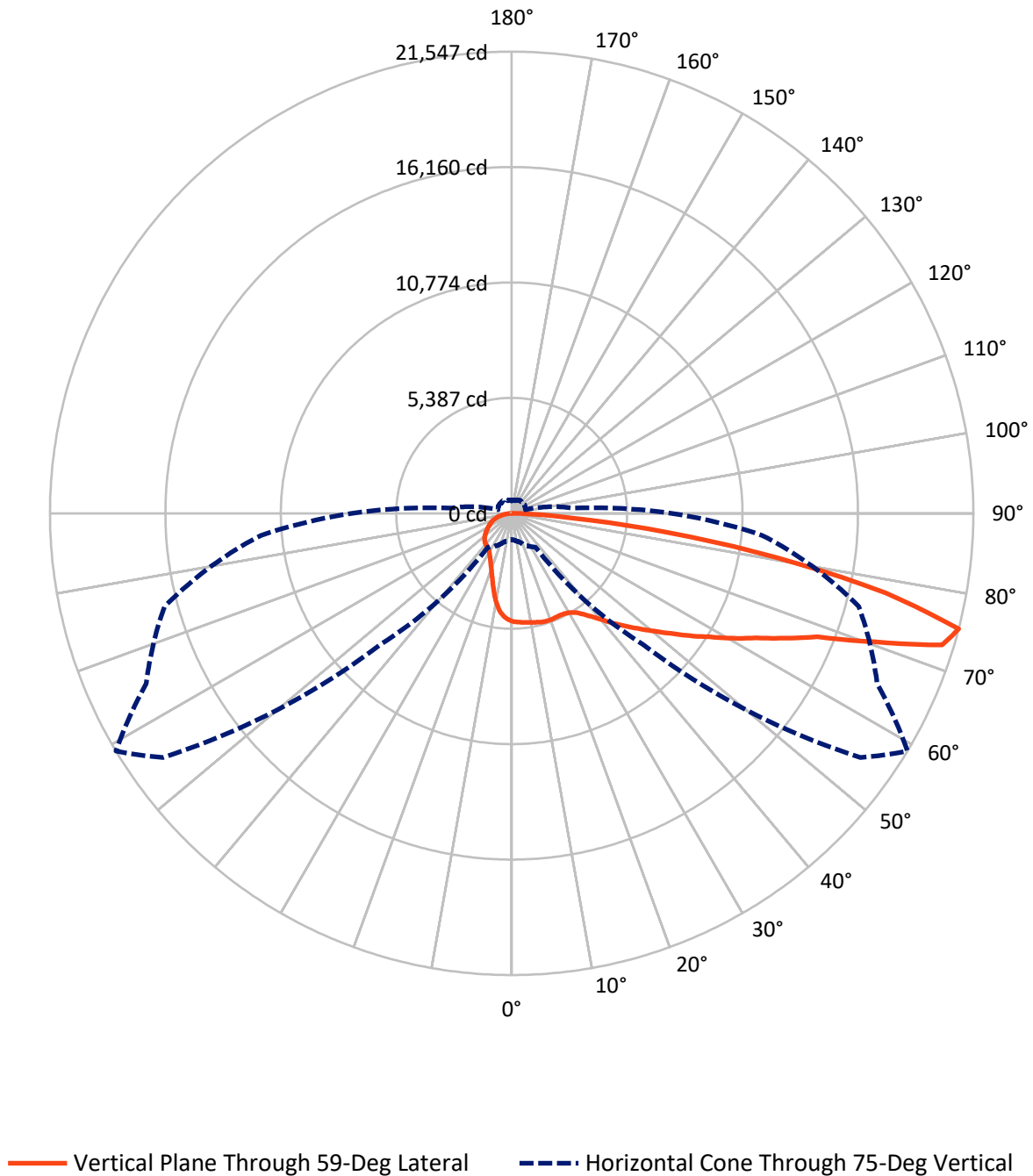
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
 Type IV - Medium - N/A

REPORT NUMBER: P965241
CATALOG NUMBER: NAV-SB3D-830-U-SL3

Luminous Intensity Polar Plot



REPORT NUMBER: P965241

CATALOG NUMBER: NAV-SB3D-830-U-SL3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5154.7	0.0	5154.7
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	22328.6	0.0	22328.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	27483.3	0.0	27483.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	452.3	1.6
10°-20°	1156.2	4.2
20°-30°	1756.1	6.4
30°-40°	2610.4	9.5
40°-50°	3882.2	14.1
50°-60°	5269.6	19.2
60°-70°	6433.3	23.4
70°-80°	5048.7	18.4
80°-90°	874.6	3.2
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°	27483.3	100.0
0°-180°	27483.3	100.0

Coefficient of Utilization



REPORT NUMBER: P965241

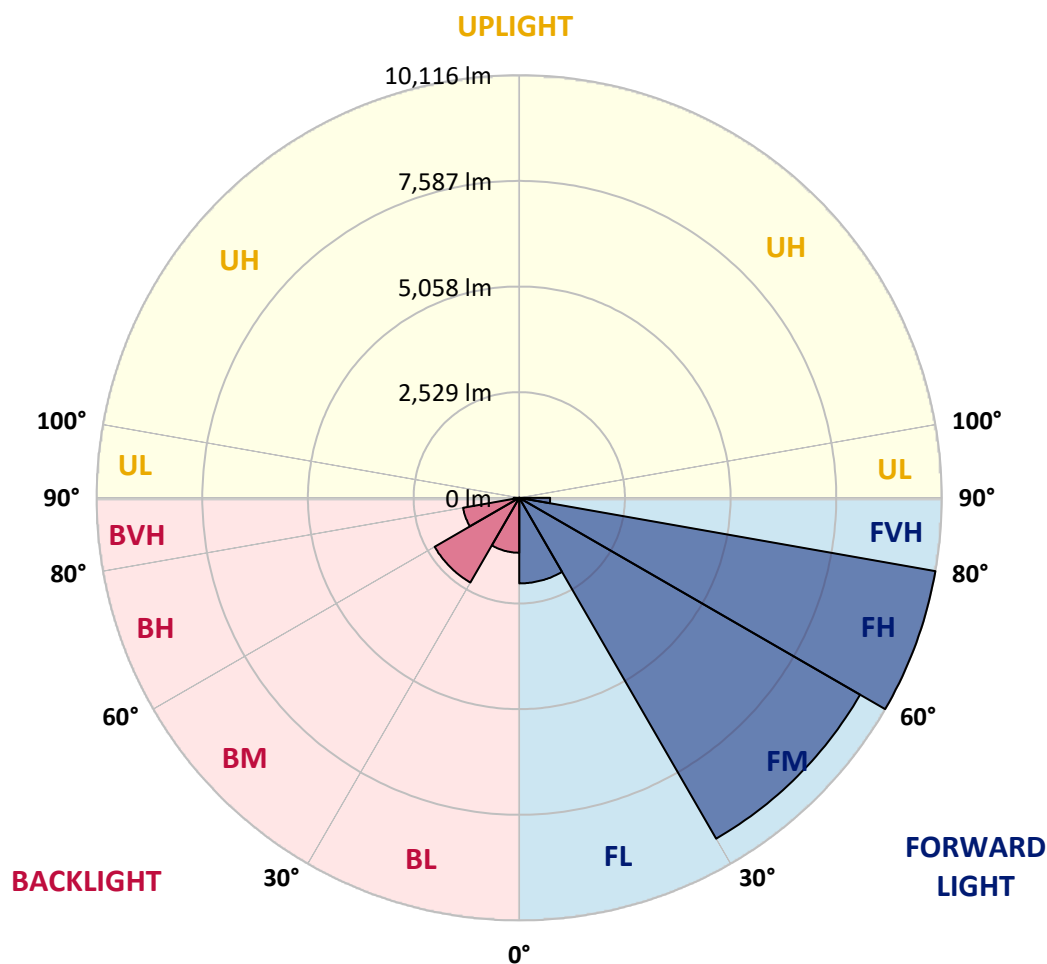
CATALOG NUMBER: NAV-SB3D-830-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2049.2	7.5			
FM	(30°-60°)	9422.4	34.3			
FH	(60°-80°)	10116.3	36.8			G4/12000
FVH	(80°-90°)	740.7	2.7			G4/750
BL	(0°-30°)	1315.4	4.8	B3/2500		
BM	(30°-60°)	2339.7	8.5	B2/2500		
BH	(60°-80°)	1365.7	5.0	B3/2500		G3/2500
BVH	(80°-90°)	133.9	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium



REPORT NUMBER: P965241

CATALOG NUMBER: NAV-SB3D-830-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5
2.5°	5087.4	5069.6	5087.4	5080.0	5077.0	5071.1	5072.6	5083.0	5077.0	5084.4	5059.3
5°	5053.4	5043.0	5060.7	5056.3	5075.6	5078.5	5097.7	5109.5	5116.9	5118.4	5099.2
7.5°	4997.2	4986.8	5011.9	5032.6	5074.1	5085.9	5125.8	5145.0	5155.3	5173.2	5145.0
10°	4791.7	4787.3	4849.4	4927.7	5025.3	5085.9	5146.5	5179.0	5195.3	5242.6	5210.1
12.5°	4428.0	4433.9	4515.2	4666.0	4861.2	5056.3	5170.2	5217.5	5242.6	5301.7	5287.0
15°	4080.5	4079.1	4167.8	4328.9	4602.5	4926.3	5182.0	5263.3	5306.2	5393.4	5381.6
17.5°	3879.5	3873.6	3935.7	4058.4	4312.7	4726.7	5152.5	5288.5	5380.1	5489.5	5479.1
20°	3842.5	3830.7	3863.2	3923.8	4104.2	4507.8	5075.6	5288.5	5439.3	5581.2	5575.3
22.5°	3977.1	3957.8	3944.5	3937.1	4017.0	4327.4	4988.4	5270.8	5526.5	5712.7	5702.4
25°	4247.6	4218.1	4150.0	4083.5	4059.8	4246.2	4911.5	5266.2	5656.6	5890.2	5851.7
27.5°	4685.3	4648.3	4510.8	4351.1	4207.7	4287.6	4877.5	5292.9	5800.0	6077.9	6001.1
30°	5227.8	5187.9	5014.9	4769.5	4512.3	4441.3	4920.3	5371.2	5983.3	6327.8	6177.0
32.5°	5714.3	5669.9	5522.1	5272.2	4924.7	4707.4	5056.3	5520.5	6271.7	6675.2	6441.6
35°	6146.0	6094.2	5961.2	5730.5	5430.3	5081.4	5301.7	5785.2	6681.2	7240.0	6800.9
37.5°	6568.8	6508.1	6363.3	6119.4	5909.4	5579.7	5640.4	6125.3	7225.2	7926.0	7277.0
40°	7041.9	6954.6	6778.7	6537.8	6333.7	6163.7	6085.3	6542.2	7778.2	8691.9	7871.3
42.5°	7500.2	7417.4	7207.5	7002.0	6746.2	6697.5	6601.3	7030.1	8382.9	9533.1	8474.5
45°	7994.1	7895.0	7640.7	7380.5	7219.3	7052.2	7101.0	7518.0	8975.7	10390.6	9107.3
47.5°	8456.8	8345.9	8045.7	7756.0	7667.3	7350.9	7559.4	8054.7	9592.3	11259.9	9734.2
50°	8706.7	8597.3	8347.4	8085.7	8016.2	7719.1	8056.1	8644.5	10238.3	12126.4	10335.9
52.5°	8915.1	8796.9	8470.1	8325.3	8304.6	8119.7	8668.2	9318.7	10884.4	12892.1	10917.0
55°	9136.8	9005.3	8588.4	8458.3	8552.9	8569.1	9394.1	10083.1	11567.4	13638.8	11465.4
57.5°	9392.7	9225.6	8702.2	8570.6	8795.3	9095.4	10228.0	10875.6	12238.7	14330.7	11953.3
60°	9633.7	9465.1	8921.0	8749.5	9057.0	9706.1	11184.6	11835.1	12998.6	14947.3	12414.6
62.5°	9680.9	9541.9	9095.4	9094.0	9411.9	10418.7	12317.0	12803.5	13662.4	15556.3	12828.6
65°	8861.8	8774.6	8510.1	9080.7	9920.5	11444.7	13578.2	14042.4	14506.6	16088.6	13192.3
67.5°	6744.7	6756.6	6737.3	7838.8	9509.4	12918.8	15404.1	15368.5	15548.9	16685.9	13610.7
70°	3084.0	3153.5	3606.0	5411.2	7618.5	13088.8	18423.0	17963.3	16857.4	17459.1	13972.9
72.5°	1666.2	1719.4	1904.2	2621.3	4580.3	11636.9	20679.2	21005.9	18597.5	17979.5	13575.2
75°	1222.7	1252.2	1380.9	1666.2	1923.5	8648.9	19870.4	21547.0	18814.9	16765.7	11722.7
77.5°	915.1	928.4	1033.4	1320.3	984.6	4559.6	15877.1	17845.0	16106.3	13774.8	8659.3
80°	663.8	678.7	757.0	990.6	690.4	1667.7	10902.2	12525.5	11030.7	8780.6	4315.7
82.5°	458.3	464.2	498.3	674.1	482.0	647.6	6185.9	7344.9	6157.8	3081.1	1165.0
85°	276.4	283.8	298.7	393.3	273.5	307.5	2670.1	2761.8	1840.7	736.3	362.2
87.5°	113.9	121.3	133.0	165.5	107.9	85.8	440.5	553.0	344.5	215.9	112.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P965241

CATALOG NUMBER: NAV-SB3D-830-U-SL3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5	5044.5
2.5°	5051.9	5041.6	5013.5	4975.0	4939.6	4895.2	4875.9	4859.7	4844.9	4816.8	4803.6
5°	5083.0	5054.9	4979.4	4881.9	4771.0	4649.7	4531.5	4450.1	4380.6	4328.9	4286.0
7.5°	5130.2	5077.0	4939.6	4739.9	4485.6	4225.5	3990.3	3823.2	3697.6	3651.8	3571.9
10°	5179.0	5115.5	4875.9	4524.0	4084.9	3684.4	3372.4	3200.9	3100.3	3067.8	3017.5
12.5°	5236.7	5143.6	4776.9	4223.9	3637.0	3197.9	2925.9	2825.3	2773.5	2755.8	2760.3
15°	5321.0	5167.2	4627.6	3848.5	3209.7	2843.0	2667.2	2597.7	2571.0	2569.6	2575.5
17.5°	5384.5	5171.6	4395.5	3446.3	2881.5	2628.7	2483.8	2457.2	2475.0	2501.5	2511.9
20°	5455.6	5131.8	4090.9	3079.6	2650.9	2440.9	2380.4	2398.1	2440.9	2479.4	2492.7
22.5°	5505.8	5059.3	3722.8	2794.3	2451.3	2333.0	2330.0	2367.0	2390.7	2409.9	2420.2
25°	5550.2	4936.6	3332.5	2554.8	2287.2	2267.9	2300.5	2288.6	2272.4	2288.6	2299.0
27.5°	5582.7	4742.9	2983.6	2344.8	2171.9	2223.6	2204.4	2177.8	2176.3	2185.2	2200.0
30°	5572.3	4484.2	2696.7	2145.2	2090.6	2140.8	2095.0	2090.6	2086.1	2090.6	2106.8
32.5°	5572.3	4190.0	2476.4	2007.8	2038.8	2019.6	2015.2	2004.8	1987.1	1985.5	2004.8
35°	5603.4	3895.7	2287.2	1933.9	1995.9	1950.1	1953.0	1927.9	1890.9	1873.2	1890.9
37.5°	5666.9	3659.1	2099.4	1898.3	1920.5	1919.0	1907.2	1864.4	1799.3	1743.1	1762.3
40°	5820.7	3589.7	1970.8	1882.1	1885.1	1902.8	1871.8	1788.9	1641.1	1549.4	1561.3
42.5°	6061.6	3706.5	1942.7	1842.1	1861.4	1879.1	1818.6	1626.3	1521.3	1466.7	1466.7
45°	6367.7	3910.5	2003.4	1784.5	1805.2	1836.3	1655.9	1564.3	1516.9	1518.3	1525.8
47.5°	6755.1	4124.9	2115.7	1734.2	1723.8	1741.6	1548.0	1491.8	1426.7	1443.0	1484.4
50°	7203.1	4342.2	2222.1	1666.2	1633.7	1576.0	1478.5	1425.3	1342.4	1304.0	1314.4
52.5°	7688.0	4552.1	2265.0	1583.4	1536.2	1469.5	1431.1	1366.1	1265.6	1202.0	1200.5
55°	8147.8	4742.9	2217.7	1484.4	1438.6	1386.8	1380.9	1341.0	1233.1	1144.3	1144.3
57.5°	8582.4	4902.6	2099.4	1383.9	1339.5	1308.4	1348.4	1329.1	1193.1	1079.3	1073.4
60°	8950.6	5011.9	1927.9	1281.9	1250.8	1234.5	1295.1	1289.2	1136.9	1009.8	1005.3
62.5°	9243.3	5054.9	1738.7	1184.3	1176.8	1147.3	1221.2	1221.2	1066.0	941.8	937.4
65°	9472.5	5013.5	1546.4	1088.1	1102.9	1058.6	1131.0	1122.2	990.6	881.2	875.2
67.5°	9675.1	4877.5	1333.5	993.5	1027.6	971.4	1036.4	1015.7	907.7	820.5	814.7
70°	9765.2	4561.0	1091.1	898.9	940.3	885.6	941.8	903.3	814.7	755.5	743.6
72.5°	9040.8	3790.8	859.0	799.8	835.4	791.0	839.8	795.4	714.1	687.5	665.3
75°	7479.5	2844.6	660.9	691.9	718.5	684.5	717.1	684.5	610.6	629.9	575.1
77.5°	5431.9	1920.5	505.6	578.1	589.9	572.2	600.2	563.3	496.7	492.3	470.2
80°	2701.2	1125.1	396.3	456.8	452.4	440.5	473.1	455.4	399.1	422.8	418.4
82.5°	782.1	482.0	288.3	320.8	311.9	314.9	338.6	347.5	520.4	516.0	527.8
85°	245.4	189.2	173.0	178.9	170.0	174.5	199.6	396.3	366.6	214.3	232.2
87.5°	63.6	65.1	42.8	45.8	47.4	56.2	63.6	241.0	115.3	75.4	79.8
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)