

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: P965239

Luminaire Tested: **NAV-SB3D-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965239
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27949.7 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - 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



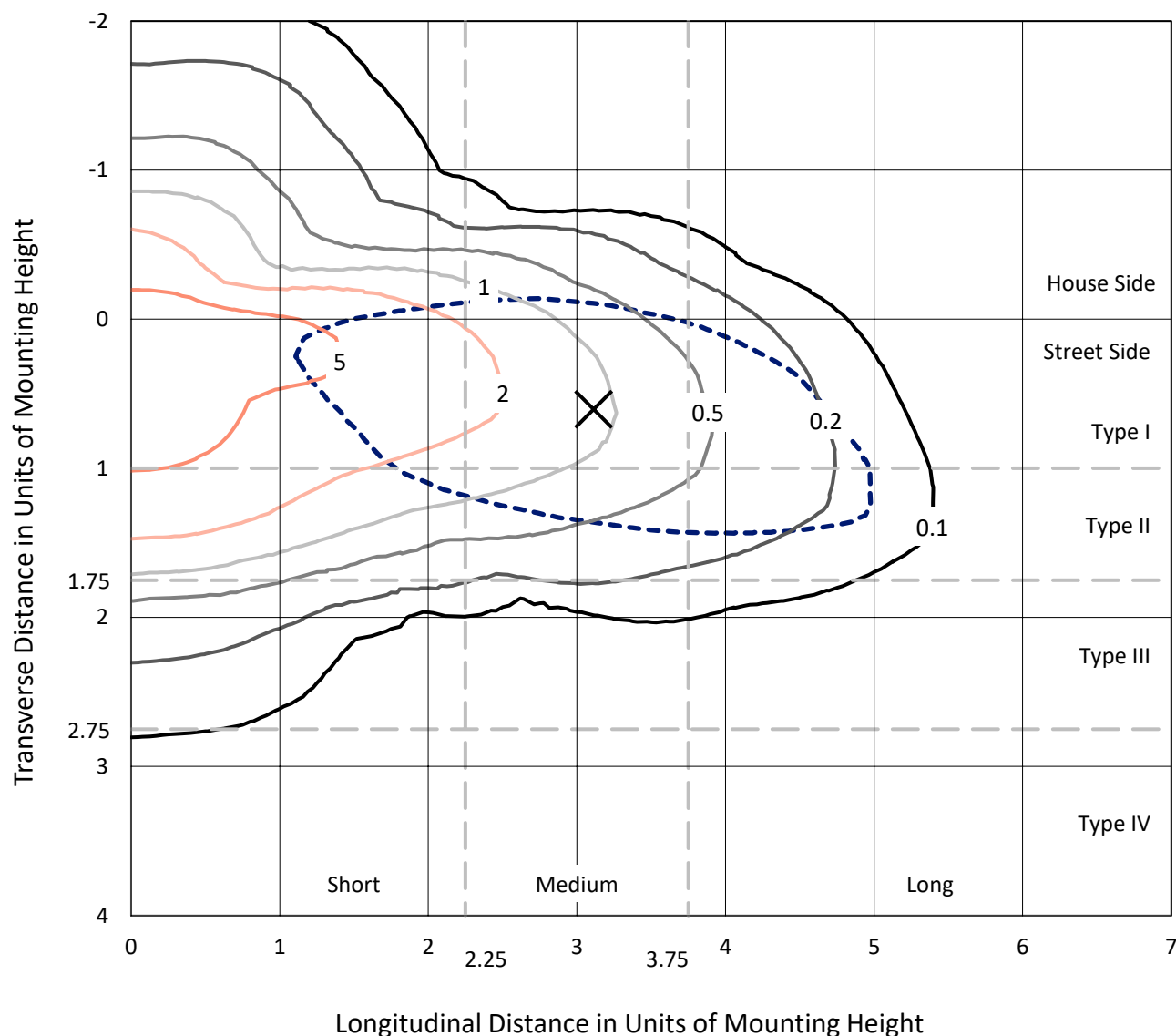
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

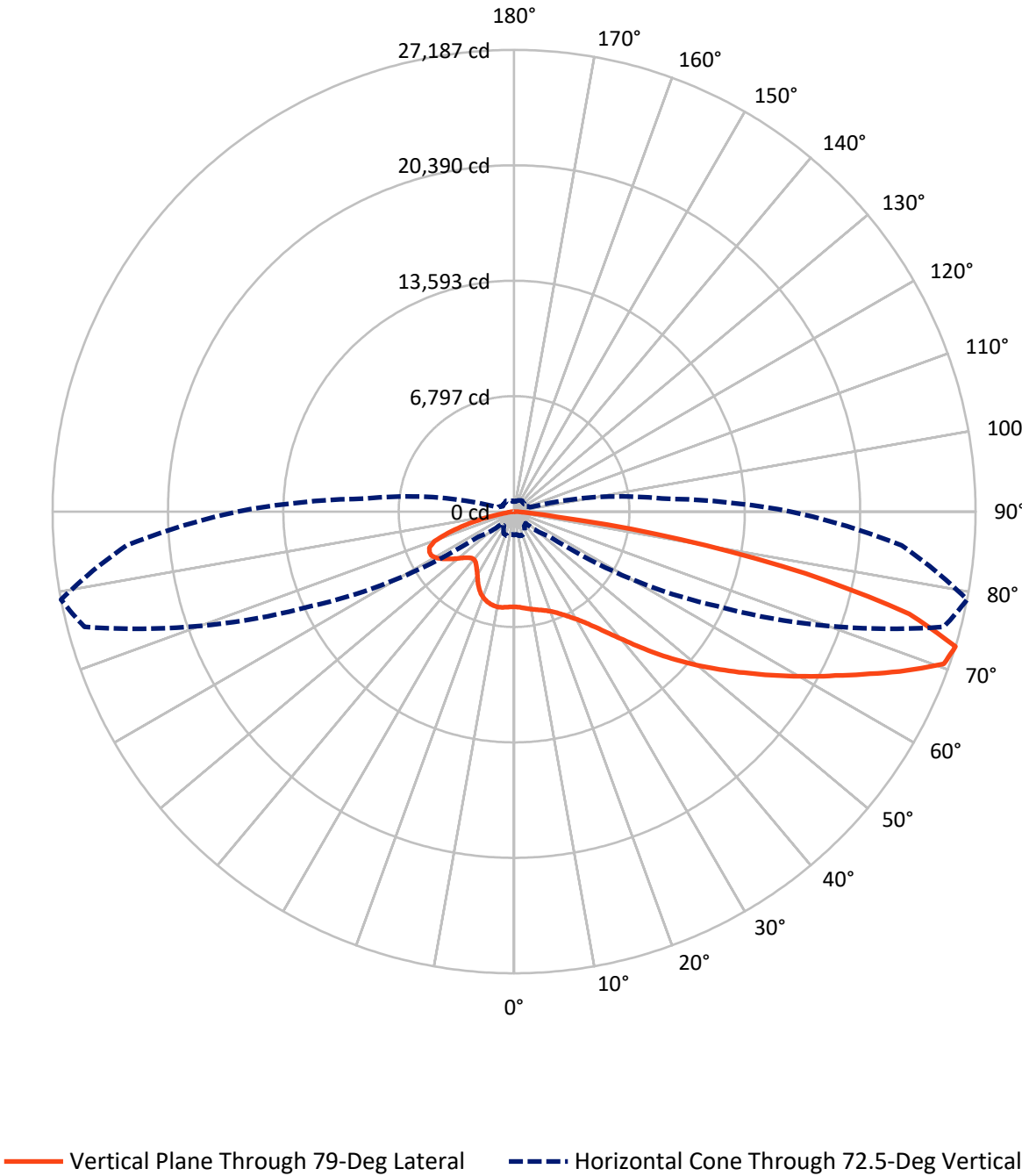
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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	6150.5	0.0	6150.5
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	21799.2	0.0	21799.2
	% Fixture	78.0	0.0	78.0
Total	Lumens	27949.7	0.0	27949.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	509.3	1.8
10°-20°	1331.5	4.8
20°-30°	2148.5	7.7
30°-40°	3224.6	11.5
40°-50°	4574.3	16.4
50°-60°	5776.8	20.7
60°-70°	5867.1	21.0
70°-80°	3998.7	14.3
80°-90°	518.8	1.9
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°	27949.7	100.0
0°-180°	27949.7	100.0

Coefficient of Utilization



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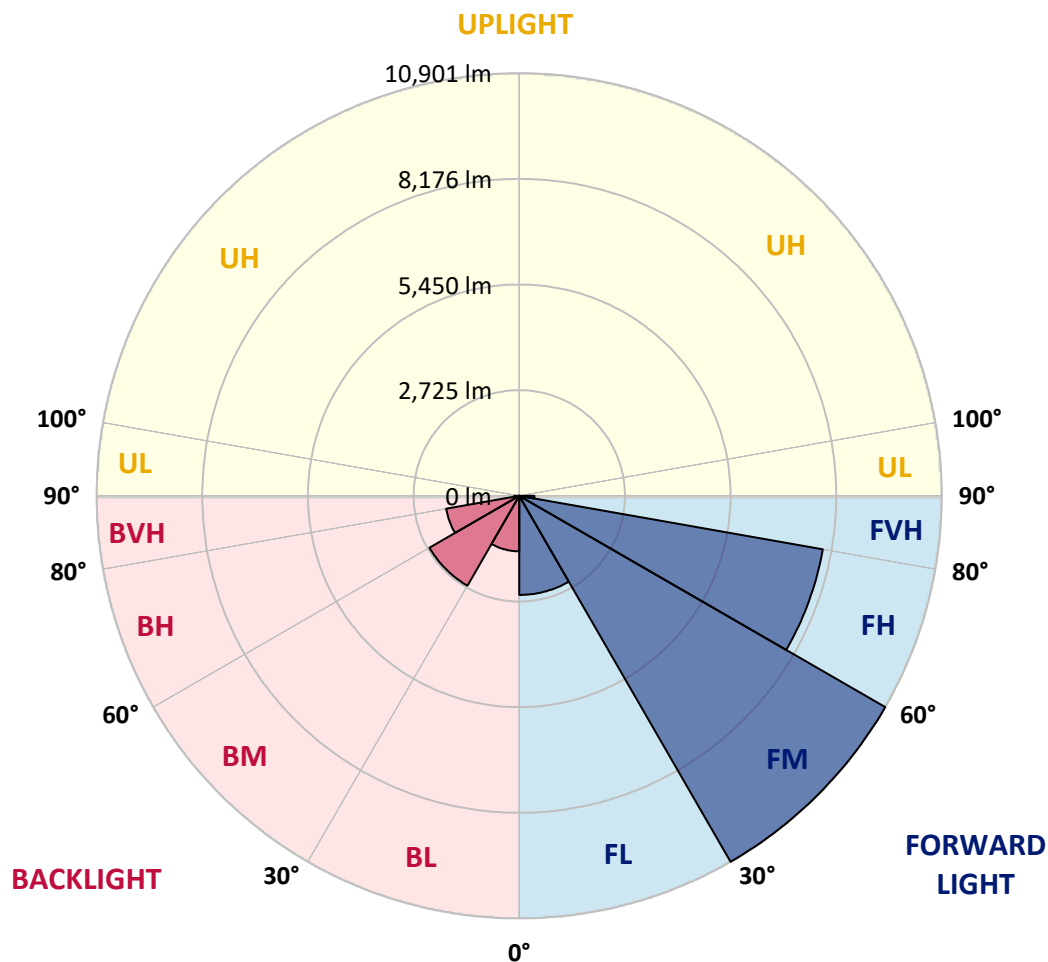
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2556.7	9.1			
FM	(30°-60°)	10901.0	39.0			
FH	(60°-80°)	7950.7	28.4			G4/12000
FVH	(80°-90°)	390.8	1.4			G3/500
BL	(0°-30°)	1432.6	5.1	B3/2500		
BM	(30°-60°)	2674.8	9.6	B3/5000		
BH	(60°-80°)	1915.1	6.9	B3/2500		G3/2500
BVH	(80°-90°)	128.0	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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6
2.5°	5613.6	5587.0	5603.3	5597.3	5604.7	5613.6	5616.6	5621.0	5635.8	5634.3	5632.8
5°	5601.7	5575.2	5597.3	5589.9	5609.1	5629.8	5647.6	5663.8	5687.5	5697.9	5683.1
7.5°	5576.6	5558.9	5581.0	5603.3	5638.7	5669.8	5694.9	5731.9	5765.8	5771.8	5782.1
10°	5430.2	5416.9	5468.7	5526.4	5624.0	5708.2	5763.0	5805.8	5842.7	5848.6	5863.4
12.5°	5278.0	5261.7	5319.3	5397.8	5555.9	5708.2	5823.5	5879.7	5912.2	5931.5	5953.6
15°	5252.8	5239.6	5272.1	5340.0	5471.7	5668.2	5864.9	5968.4	5996.6	6018.7	6027.5
17.5°	5374.1	5349.0	5362.3	5386.0	5462.8	5631.3	5897.4	6068.9	6111.9	6135.4	6135.4
20°	5655.0	5619.5	5598.9	5551.5	5538.2	5637.3	5894.5	6190.2	6246.3	6276.0	6283.4
22.5°	6029.0	6005.4	5961.0	5841.3	5711.2	5709.7	5950.6	6345.4	6450.4	6478.5	6460.8
25°	6481.4	6445.9	6389.7	6227.2	5977.3	5853.1	6045.2	6543.5	6719.5	6726.9	6675.1
27.5°	7001.9	6948.6	6871.7	6657.4	6320.3	6077.8	6190.2	6771.3	7028.4	7025.5	6919.1
30°	7550.4	7497.2	7415.8	7155.6	6731.3	6380.9	6391.3	7016.6	7395.1	7378.9	7197.0
32.5°	7951.0	7911.1	7894.9	7693.8	7204.4	6738.7	6621.9	7288.7	7847.5	7832.7	7578.4
35°	8258.5	8206.8	8225.9	8123.9	7720.4	7139.3	6904.3	7612.5	8397.5	8396.0	8079.6
37.5°	8563.1	8517.2	8533.5	8465.5	8197.8	7647.9	7248.7	8008.6	9079.0	9111.5	8685.7
40°	8841.0	8792.2	8857.2	8793.7	8569.0	8189.0	7640.6	8456.7	9868.5	9930.6	9419.0
42.5°	9008.1	8969.7	9077.5	9079.0	8891.3	8645.9	8070.7	8950.4	10782.2	10921.2	10320.9
45°	9065.7	9052.4	9215.1	9249.1	9176.6	8910.5	8458.1	9488.5	11766.8	12015.2	11348.4
47.5°	9003.6	8978.5	9203.2	9328.9	9386.5	9034.7	8778.9	10071.0	12772.1	13135.9	12469.0
50°	8690.2	8641.4	8975.5	9240.2	9445.7	9115.9	9102.7	10743.7	13915.0	14312.7	13595.6
52.5°	8126.9	8089.9	8469.9	8929.7	9315.6	9155.9	9466.4	11478.6	15000.2	15514.6	14750.3
55°	7407.0	7358.2	7776.6	8376.8	8991.8	9142.6	9830.1	12300.5	16280.5	16802.3	15943.4
57.5°	6265.6	6168.0	6697.2	7407.0	8464.0	9126.3	10208.6	13118.1	17581.5	18206.9	17216.3
60°	4600.9	4456.0	5105.0	5946.2	7432.1	8968.1	10677.2	14034.7	19142.7	19705.9	18606.0
62.5°	2678.9	2594.7	3018.9	3804.0	5601.7	8036.7	10940.3	15100.7	20677.3	21268.6	19972.1
65°	2080.1	2056.5	2093.5	2154.0	3118.0	6017.2	10128.7	16140.0	22628.8	23042.8	21395.8
67.5°	1902.7	1885.0	1901.3	1787.4	1581.9	3351.6	8013.0	16403.2	24719.3	24970.6	22642.1
70°	1691.4	1670.6	1723.8	1626.3	1244.9	1524.3	5177.5	15448.1	26382.6	26854.2	23589.8
72.5°	1377.9	1354.2	1478.5	1434.1	1048.2	978.7	2600.5	13178.7	26208.1	27186.8	22911.2
75°	1058.5	1045.3	1193.1	1230.1	854.5	770.3	1247.8	9796.0	23063.5	24049.6	19745.9
77.5°	822.0	811.7	887.0	1021.6	688.9	597.3	767.3	6213.9	17380.4	17553.4	13607.5
80°	616.5	586.9	656.4	791.0	536.7	436.1	520.4	3623.6	10986.2	9958.7	5922.6
82.5°	385.9	371.0	428.8	527.8	378.4	300.1	338.6	2001.8	4402.8	2593.1	1142.9
85°	220.3	214.3	233.6	301.6	205.5	173.0	193.7	884.1	804.2	552.9	344.5
87.5°	88.7	85.8	106.5	134.6	75.4	63.6	68.0	212.9	177.4	164.1	113.9
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°	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6	5610.6
2.5°	5626.9	5626.9	5606.2	5573.6	5536.7	5513.1	5474.6	5464.3	5424.4	5412.5	5431.8
5°	5694.9	5683.1	5619.5	5527.8	5402.2	5286.8	5159.7	5079.9	4967.6	4927.6	4957.2
7.5°	5780.7	5748.1	5638.7	5437.6	5174.5	4915.8	4646.7	4442.7	4247.5	4178.0	4186.9
10°	5859.0	5813.2	5626.9	5275.1	4819.7	4371.7	3943.0	3642.8	3415.2	3322.0	3342.7
12.5°	5937.4	5853.1	5548.5	5004.5	4315.6	3707.9	3251.1	3017.5	2877.1	2764.6	2801.6
15°	6011.3	5893.0	5427.3	4642.2	3762.6	3146.1	2809.0	2622.8	2510.3	2436.4	2449.8
17.5°	6097.0	5927.1	5245.4	4182.5	3236.2	2757.2	2482.2	2369.9	2347.8	2338.8	2344.8
20°	6216.8	5958.0	5006.0	3668.0	2848.9	2446.8	2304.9	2294.6	2293.0	2288.6	2303.4
22.5°	6345.4	5995.0	4689.6	3200.8	2519.2	2253.2	2228.0	2207.3	2194.0	2192.5	2208.8
25°	6497.7	6006.8	4293.3	2817.9	2238.3	2161.4	2131.9	2100.8	2092.0	2092.0	2100.8
27.5°	6645.6	5966.9	3832.1	2485.2	2080.1	2077.2	2038.7	2028.4	2026.9	2031.3	2043.2
30°	6793.4	5891.5	3373.8	2177.7	1988.5	1988.5	1975.2	1982.6	1988.5	2003.3	2013.6
32.5°	6993.0	5811.7	2990.8	1950.1	1908.7	1893.9	1907.2	1922.0	1927.8	1947.1	1963.4
35°	7285.7	5755.5	2686.3	1825.8	1825.8	1806.7	1814.0	1811.1	1797.7	1788.9	1809.6
37.5°	7673.0	5752.6	2435.0	1768.2	1756.3	1753.5	1754.9	1735.6	1684.0	1621.9	1623.3
40°	8138.7	5832.4	2241.3	1728.3	1719.4	1737.2	1728.3	1676.5	1534.6	1426.7	1423.7
42.5°	8764.2	6060.1	2117.1	1679.5	1706.1	1728.3	1692.8	1513.9	1417.8	1345.4	1342.4
45°	9500.4	6429.7	2053.6	1627.7	1681.0	1707.5	1536.1	1457.8	1380.9	1293.7	1287.7
47.5°	10334.3	6895.4	2038.7	1579.0	1624.8	1641.0	1469.5	1434.1	1346.8	1252.2	1244.9
50°	11242.0	7446.8	2078.7	1521.3	1543.4	1487.3	1447.4	1414.8	1324.7	1231.5	1221.2
52.5°	12180.8	8054.4	2158.5	1443.0	1462.2	1400.0	1438.5	1410.4	1311.4	1185.7	1176.8
55°	13103.3	8666.6	2235.4	1351.3	1379.3	1321.7	1413.4	1392.7	1250.7	1108.8	1101.5
57.5°	14040.7	9275.6	2310.8	1270.0	1299.5	1246.3	1373.5	1345.4	1182.7	1037.8	1034.9
60°	15014.9	9867.1	2346.2	1191.6	1212.3	1176.8	1312.8	1264.0	1105.9	965.4	960.9
62.5°	15927.1	10359.4	2288.6	1113.3	1126.6	1111.8	1233.0	1168.0	1029.0	884.1	882.6
65°	16842.3	10652.1	2111.2	1036.4	1039.4	1032.0	1120.6	1064.5	938.8	813.1	804.2
67.5°	17671.6	10816.2	1828.8	953.6	946.2	943.2	1015.7	952.1	851.6	742.2	733.3
70°	17847.6	10399.2	1397.1	856.0	856.0	848.6	900.4	835.3	755.5	666.8	663.8
72.5°	16301.2	8747.9	992.0	745.2	757.0	742.2	785.0	730.3	657.9	598.8	581.1
75°	13144.7	6414.9	721.5	631.3	652.0	626.9	666.8	628.3	566.2	564.8	508.6
77.5°	9031.7	3966.6	523.4	520.4	535.2	502.7	548.5	527.8	471.6	446.5	418.4
80°	3854.3	1581.9	381.4	402.1	402.1	372.6	425.8	431.7	382.9	371.0	371.0
82.5°	767.3	449.5	267.6	276.4	260.2	251.3	301.6	334.2	461.2	513.0	514.4
85°	230.6	165.5	161.1	150.8	133.0	134.6	177.4	335.6	414.0	236.6	204.0
87.5°	63.6	41.4	42.8	34.0	28.1	37.0	60.6	254.3	139.0	59.1	50.2
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)