

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: P965270

Luminaire Tested: **NAV-SB3D-835-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965270
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-835-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 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: 28851.7 lumens
Efficiency: N/A
Efficacy: 132.3 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



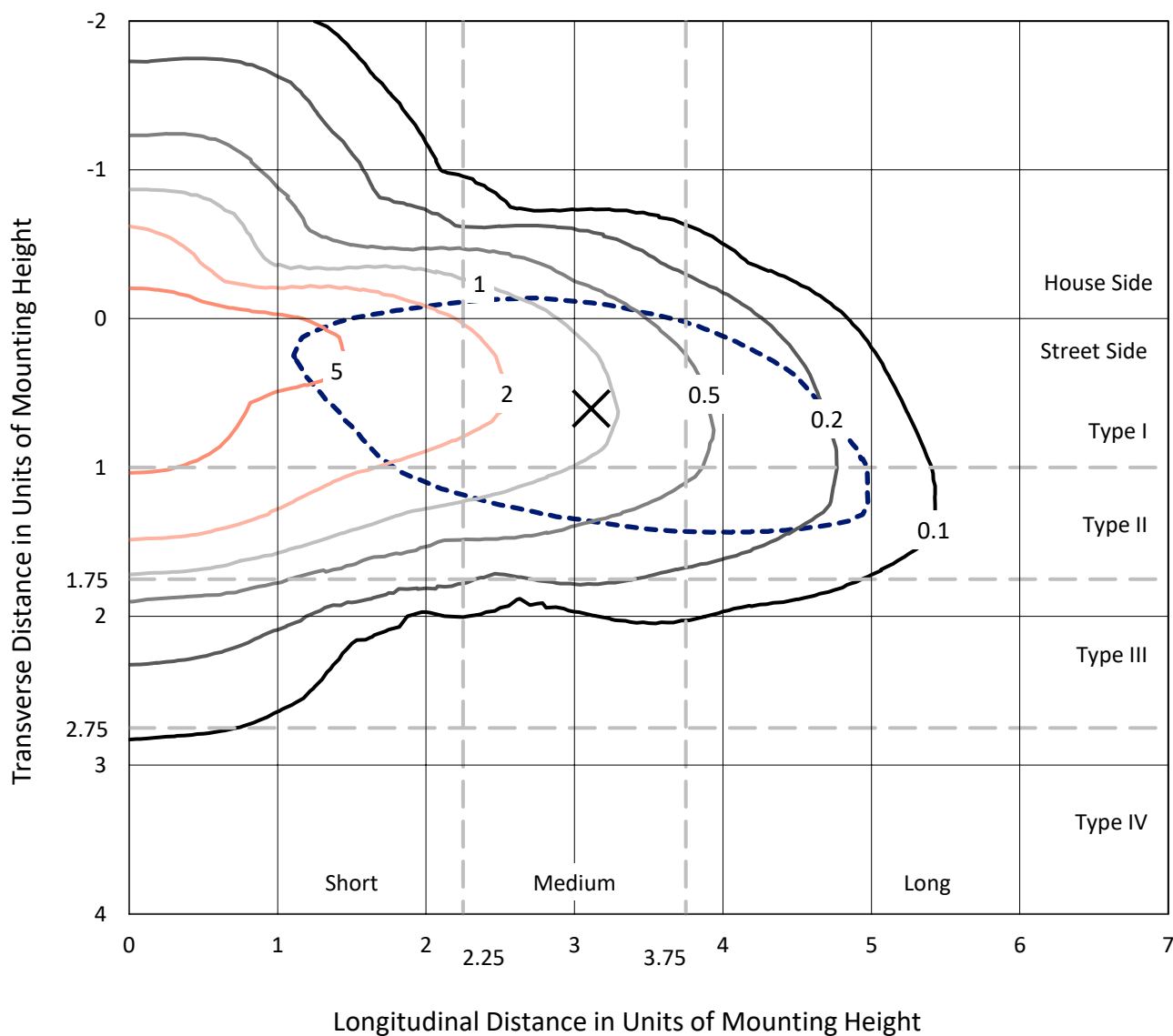
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

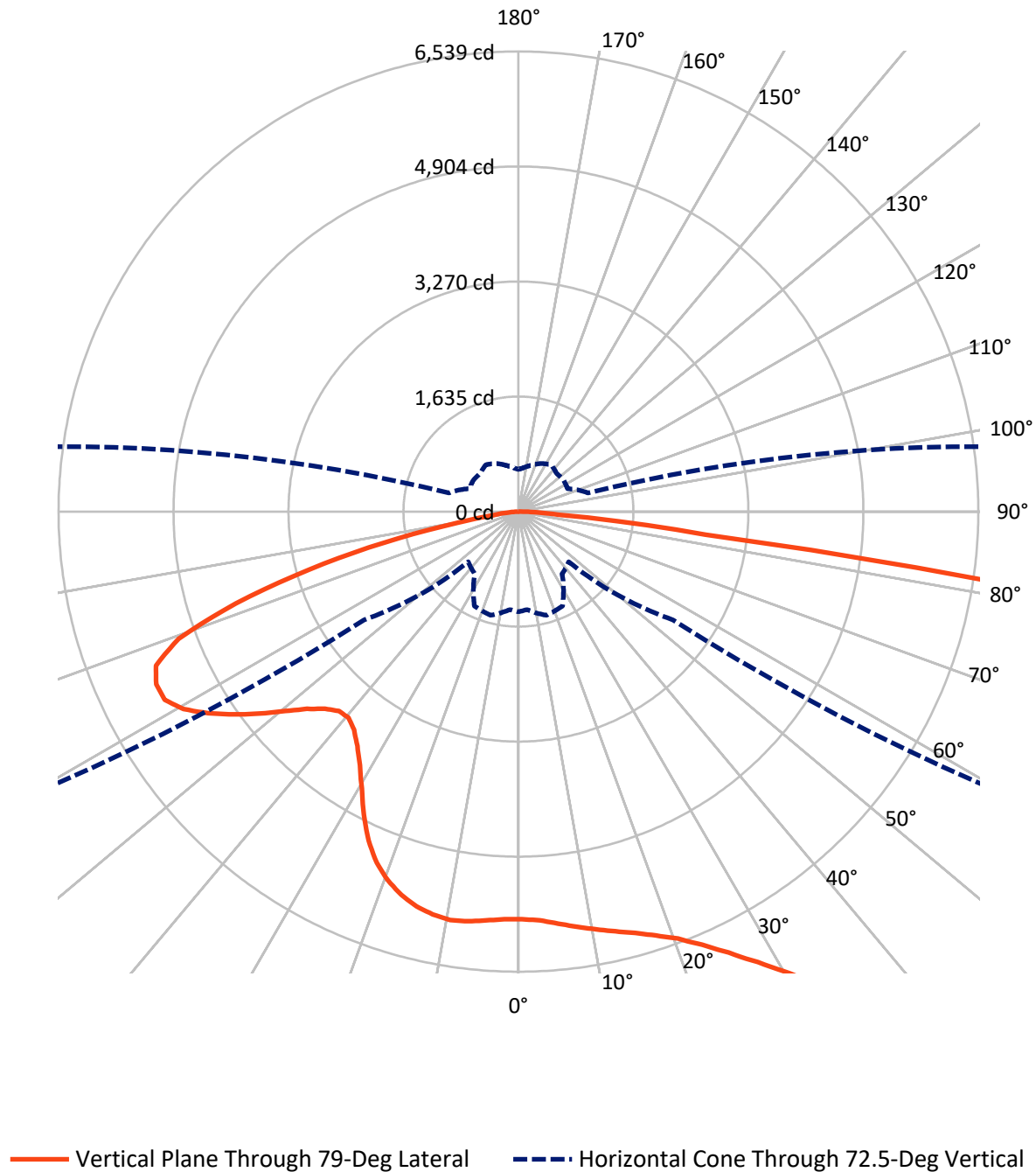
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 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	6349.0	0.0	6349.0
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	22502.7	0.0	22502.7
	% Fixture	78.0	0.0	78.0
Total	Lumens	28851.7	0.0	28851.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	525.7	1.8
10°-20°	1374.5	4.8
20°-30°	2217.9	7.7
30°-40°	3328.7	11.5
40°-50°	4722.0	16.4
50°-60°	5963.2	20.7
60°-70°	6056.4	21.0
70°-80°	4127.7	14.3
80°-90°	535.5	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°	28851.7	100.0
0°-180°	28851.7	100.0

Coefficient of Utilization



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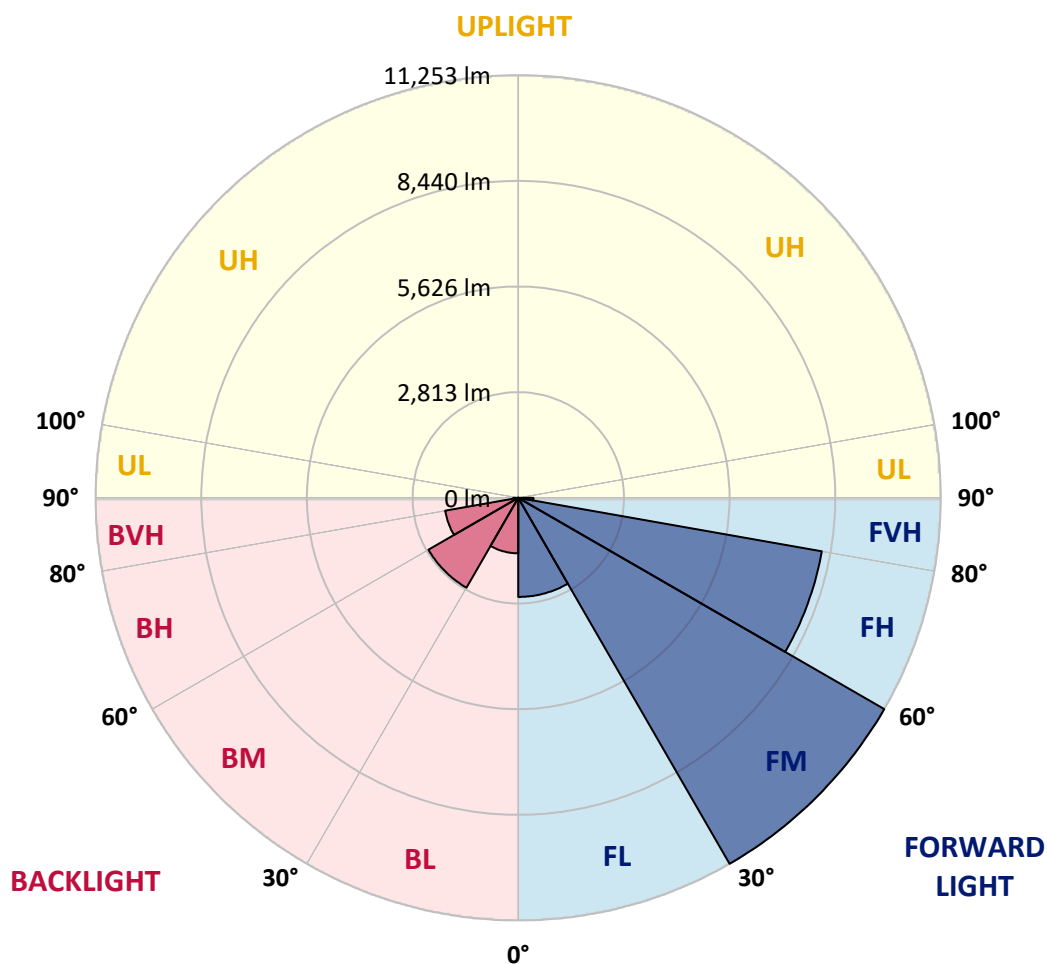
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2639.2	9.1			
FM	(30°-60°)	11252.8	39.0			
FH	(60°-80°)	8207.3	28.4			G4/12000
FVH	(80°-90°)	403.4	1.4			G3/500
BL	(0°-30°)	1478.9	5.1	B3/2500		
BM	(30°-60°)	2761.1	9.6	B3/5000		
BH	(60°-80°)	1976.9	6.9	B3/2500		G3/2500
BVH	(80°-90°)	132.1	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°	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7
2.5°	5794.7	5767.3	5784.1	5777.9	5785.6	5794.7	5797.8	5802.4	5817.7	5816.2	5814.6
5°	5782.5	5755.1	5777.9	5770.3	5790.2	5811.5	5829.9	5846.6	5871.1	5881.8	5866.5
7.5°	5756.6	5738.3	5761.2	5784.1	5820.7	5852.7	5878.7	5916.8	5952.0	5958.0	5968.8
10°	5605.5	5591.8	5645.2	5704.7	5805.4	5892.4	5948.9	5993.2	6031.3	6037.5	6052.6
12.5°	5448.3	5431.6	5491.0	5571.9	5735.3	5892.4	6011.4	6069.4	6103.1	6122.8	6145.8
15°	5422.4	5408.6	5442.2	5512.4	5648.3	5851.2	6054.2	6161.1	6190.1	6212.9	6222.1
17.5°	5547.5	5521.6	5535.3	5559.7	5639.1	5813.1	6087.8	6264.8	6309.1	6333.5	6333.5
20°	5837.5	5800.9	5779.5	5730.7	5716.9	5819.1	6084.7	6390.0	6448.0	6478.5	6486.1
22.5°	6223.6	6199.2	6153.4	6029.8	5895.5	5894.0	6142.7	6550.2	6658.5	6687.5	6669.3
25°	6690.6	6654.0	6596.0	6428.1	6170.2	6042.0	6240.4	6754.7	6936.3	6944.0	6890.6
27.5°	7227.8	7172.8	7093.5	6872.2	6524.2	6273.9	6390.0	6989.7	7255.3	7252.2	7142.3
30°	7794.0	7739.1	7655.1	7386.6	6948.5	6586.9	6597.5	7243.1	7633.8	7617.0	7429.3
32.5°	8207.6	8166.4	8149.6	7942.0	7436.9	6956.2	6835.6	7523.9	8100.8	8085.5	7823.0
35°	8525.0	8471.6	8491.4	8386.1	7969.5	7369.7	7127.0	7858.1	8668.5	8667.0	8340.3
37.5°	8839.4	8792.1	8808.8	8738.6	8462.4	7894.8	7482.7	8267.1	9372.0	9405.6	8966.1
40°	9126.3	9076.0	9143.1	9077.5	8845.5	8453.3	7887.1	8729.5	10187.0	10251.1	9723.0
42.5°	9298.8	9259.1	9370.6	9372.0	9178.3	8924.9	8331.2	9239.2	11130.2	11273.6	10654.0
45°	9358.2	9344.5	9512.4	9547.6	9472.7	9198.0	8731.1	9794.8	12146.6	12402.9	11714.6
47.5°	9294.2	9268.3	9500.2	9630.0	9689.4	9326.3	9062.2	10396.1	13184.4	13559.7	12871.4
50°	8970.7	8920.3	9265.2	9538.3	9750.5	9410.2	9396.5	11090.5	14364.0	14774.6	14034.4
52.5°	8389.2	8351.1	8743.2	9217.9	9616.2	9451.4	9771.8	11849.0	15484.3	16015.3	15226.3
55°	7646.0	7595.6	8027.5	8647.1	9282.0	9437.7	10147.3	12697.5	16805.9	17344.6	16457.9
57.5°	6467.7	6367.1	6913.4	7646.0	8737.2	9420.9	10538.0	13541.5	18148.9	18794.4	17771.9
60°	4749.3	4599.8	5269.7	6138.1	7671.9	9257.6	11021.8	14487.7	19760.5	20341.9	19206.4
62.5°	2765.3	2678.4	3116.4	3926.8	5782.5	8296.1	11293.4	15588.0	21344.6	21955.1	20616.6
65°	2147.3	2122.9	2161.0	2223.6	3218.6	6211.4	10455.6	16660.9	23359.1	23786.5	22086.3
67.5°	1964.1	1945.9	1962.6	1845.1	1632.9	3459.8	8271.6	16932.5	25517.1	25776.5	23372.9
70°	1745.9	1724.6	1779.5	1678.7	1285.0	1573.5	5344.6	15946.6	27233.9	27720.8	24351.1
72.5°	1422.4	1397.9	1526.1	1480.4	1082.0	1010.3	2684.5	13604.0	27053.8	28064.2	23650.6
75°	1092.8	1079.0	1231.6	1269.8	882.1	795.1	1288.0	10112.2	23807.8	24825.7	20383.1
77.5°	848.5	837.8	915.7	1054.5	711.1	616.5	792.0	6414.3	17941.3	18119.8	14046.6
80°	636.4	605.9	677.6	816.5	554.0	450.2	537.2	3740.5	11340.7	10280.1	6113.7
82.5°	398.3	383.0	442.6	544.8	390.7	309.9	349.5	2066.4	4544.8	2676.9	1179.7
85°	227.3	221.3	241.1	311.3	212.2	178.6	199.9	912.7	830.2	570.8	355.6
87.5°	91.5	88.6	109.9	138.9	77.8	65.6	70.2	219.8	183.2	169.4	117.5
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°	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7	5791.7
2.5°	5808.5	5808.5	5787.2	5753.5	5715.4	5691.0	5651.3	5640.6	5599.4	5587.2	5607.1
5°	5878.7	5866.5	5800.9	5706.3	5576.5	5457.5	5326.2	5243.8	5127.9	5086.7	5117.1
7.5°	5967.2	5933.6	5820.7	5613.1	5341.5	5074.5	4796.7	4586.1	4384.6	4312.9	4322.0
10°	6048.1	6000.8	5808.5	5445.3	4975.2	4512.8	4070.2	3760.4	3525.4	3429.2	3450.6
12.5°	6129.0	6042.0	5727.6	5166.0	4454.9	3827.6	3356.0	3114.9	2969.8	2853.9	2892.0
15°	6205.2	6083.2	5602.4	4792.1	3884.0	3247.6	2899.6	2707.3	2591.4	2515.0	2528.8
17.5°	6293.8	6118.3	5414.8	4317.4	3340.7	2846.2	2562.4	2446.4	2423.5	2414.4	2420.4
20°	6417.4	6150.3	5167.5	3786.3	2940.8	2525.8	2379.2	2368.6	2367.0	2362.4	2377.7
22.5°	6550.2	6188.5	4840.9	3304.1	2600.5	2325.8	2299.9	2278.6	2264.8	2263.3	2280.0
25°	6707.4	6200.7	4431.9	2908.8	2310.6	2231.2	2200.7	2168.7	2159.5	2159.5	2168.7
27.5°	6860.0	6159.5	3955.8	2565.5	2147.3	2144.2	2104.5	2093.9	2092.3	2096.9	2109.1
30°	7012.6	6081.6	3482.6	2248.0	2052.7	2052.7	2038.9	2046.5	2052.7	2067.9	2078.6
32.5°	7218.7	5999.2	3087.4	2013.0	1970.3	1955.0	1968.7	1984.0	1990.0	2009.9	2026.7
35°	7520.8	5941.3	2773.0	1884.8	1884.8	1865.0	1872.6	1869.5	1855.8	1846.6	1868.0
37.5°	7920.7	5938.2	2513.5	1825.2	1813.0	1810.0	1811.5	1791.7	1738.3	1674.1	1675.7
40°	8401.4	6020.6	2313.6	1784.0	1774.9	1793.2	1784.0	1730.6	1584.1	1472.7	1469.6
42.5°	9047.0	6255.7	2185.4	1733.7	1761.2	1784.0	1747.4	1562.8	1463.6	1388.8	1385.7
45°	9807.0	6637.2	2119.8	1680.3	1735.2	1762.7	1585.7	1504.8	1425.4	1335.4	1329.2
47.5°	10667.7	7117.9	2104.5	1630.0	1677.2	1694.0	1517.0	1480.4	1390.3	1292.6	1285.0
50°	11604.7	7687.2	2145.7	1570.4	1593.3	1535.3	1494.1	1460.5	1367.5	1271.3	1260.5
52.5°	12573.9	8314.4	2228.1	1489.5	1509.3	1445.2	1484.9	1455.9	1353.7	1224.0	1214.8
55°	13526.2	8946.2	2307.5	1394.9	1423.9	1364.4	1459.0	1437.7	1291.1	1144.6	1136.9
57.5°	14493.8	9575.0	2385.4	1311.0	1341.5	1286.6	1417.8	1388.8	1220.9	1071.3	1068.3
60°	15499.5	10185.4	2422.0	1230.1	1251.4	1214.8	1355.3	1304.8	1141.5	996.6	992.0
62.5°	16441.1	10693.6	2362.4	1149.2	1163.0	1147.7	1272.8	1205.6	1062.2	912.7	911.1
65°	17385.8	10995.9	2179.4	1069.8	1072.9	1065.3	1156.8	1098.8	969.1	839.4	830.2
67.5°	18241.9	11165.2	1887.8	984.4	976.7	973.6	1048.5	982.9	879.0	766.1	757.0
70°	18423.6	10734.8	1442.2	883.7	883.7	876.0	929.5	862.2	779.8	688.3	685.2
72.5°	16827.2	9030.1	1024.1	769.2	781.4	766.1	810.4	753.9	679.2	618.1	599.7
75°	13569.0	6621.9	744.8	651.7	673.0	647.1	688.3	648.6	584.6	583.0	525.0
77.5°	9323.2	4094.7	540.3	537.2	552.5	518.9	566.2	544.8	486.9	460.9	431.9
80°	3978.6	1632.9	393.7	415.1	415.1	384.6	439.5	445.7	395.2	383.0	383.0
82.5°	792.0	463.9	276.2	285.4	268.5	259.4	311.3	344.9	476.1	529.6	531.1
85°	238.1	171.0	166.4	155.7	137.4	138.9	183.2	346.4	427.3	244.2	210.6
87.5°	65.6	42.7	44.3	35.1	29.0	38.1	62.5	262.5	143.5	61.1	51.9
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)