

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: P964213

Luminaire Tested: **NAV-SB3B-835-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964213
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-835-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16336.5 lumens
Efficiency: N/A
Efficacy: 149.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
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

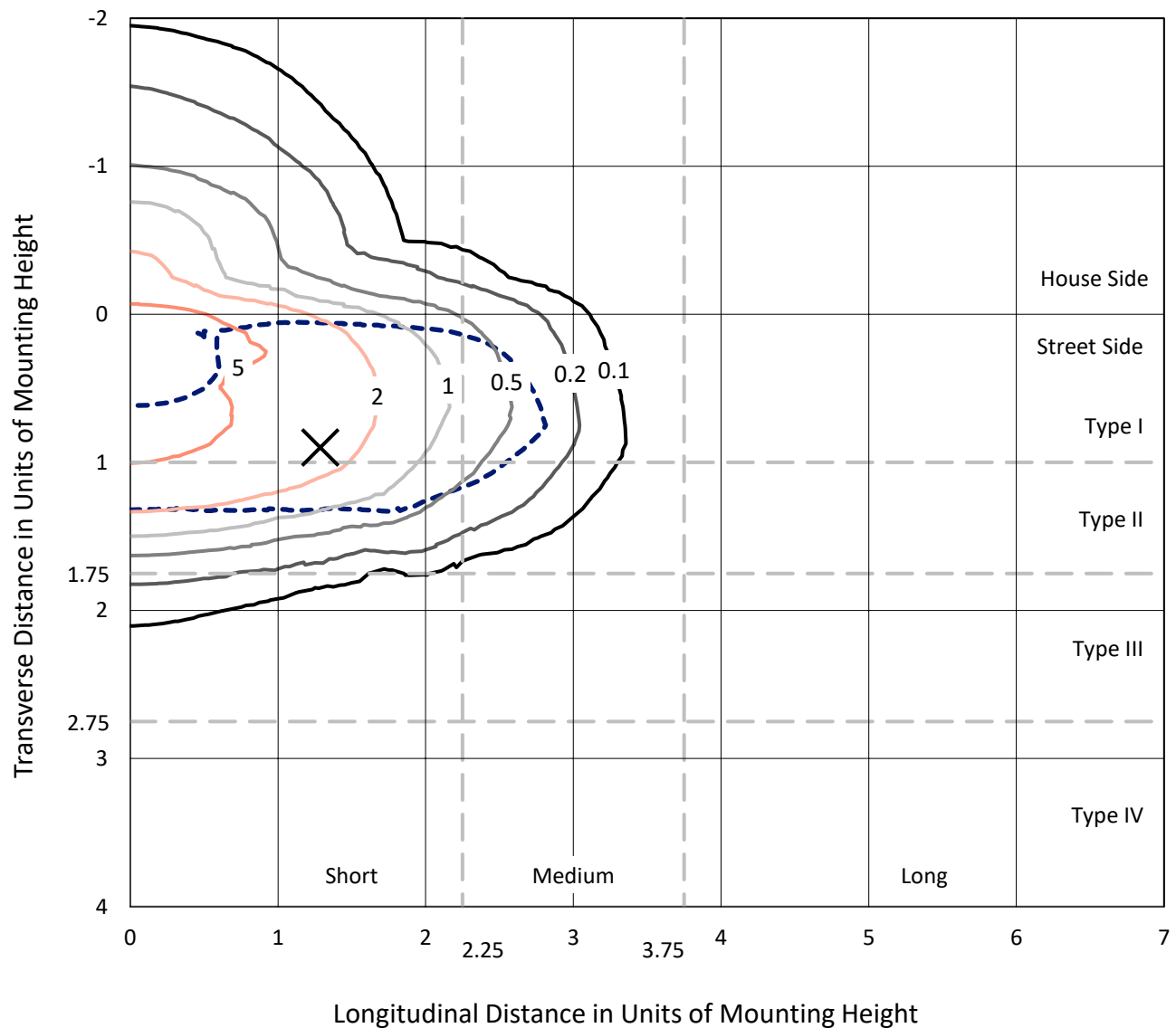


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Iso-Footcandle Lines of Horizontal Illumination

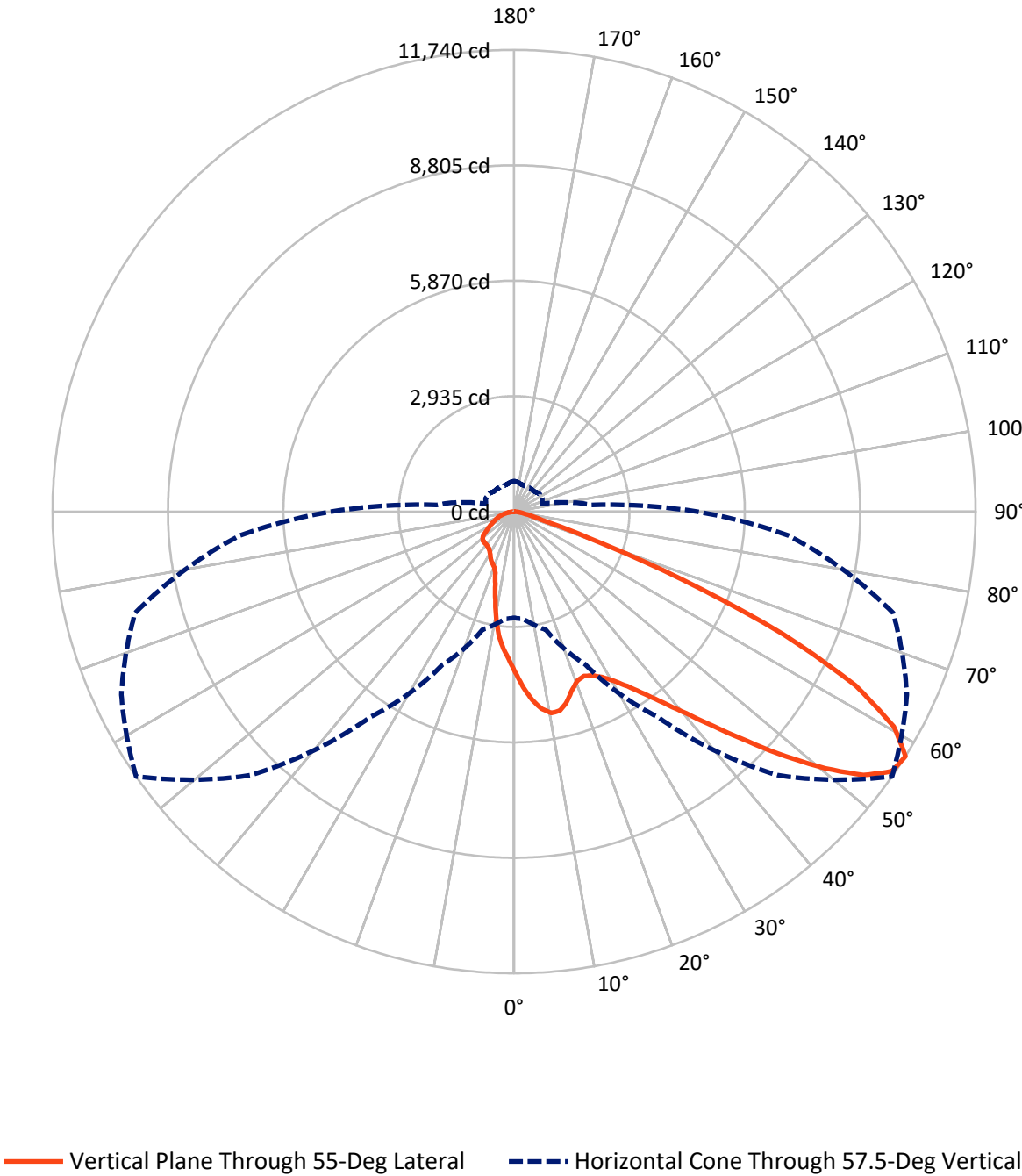
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2956.0	0.0	2956.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	13380.5	0.0	13380.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	16336.5	0.0	16336.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.8	2.3
10°-20°	958.7	5.9
20°-30°	1529.9	9.4
30°-40°	2422.2	14.8
40°-50°	3707.4	22.7
50°-60°	3971.0	24.3
60°-70°	2498.1	15.3
70°-80°	738.8	4.5
80°-90°	130.6	0.8
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°	16336.5	100.0
0°-180°	16336.5	100.0

Coefficient of Utilization



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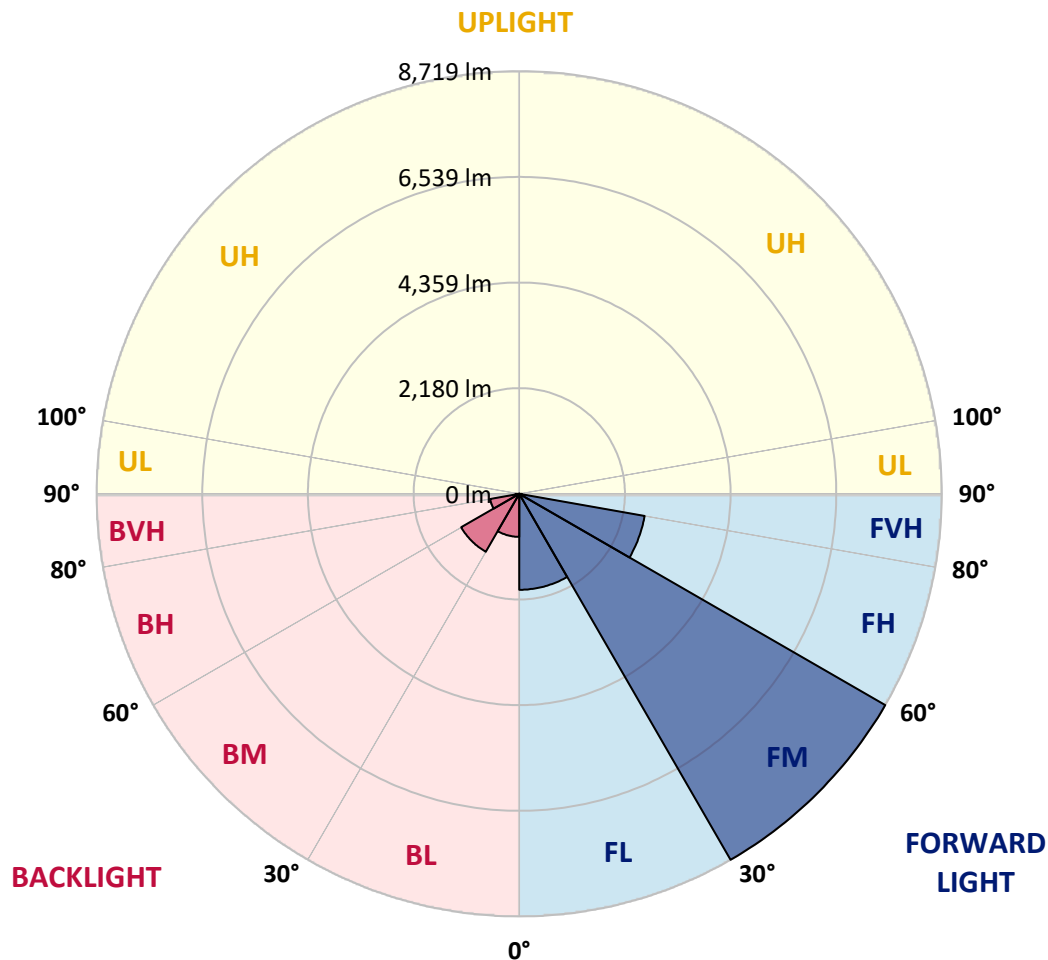
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1980.0	12.1			
FM	(30°-60°)	8718.9	53.4			
FH	(60°-80°)	2626.4	16.1			G2/5000
FVH	(80°-90°)	55.2	0.3			G1/100
BL	(0°-30°)	888.5	5.4	B2/1000		
BM	(30°-60°)	1381.6	8.5	B2/2500		
BH	(60°-80°)	610.5	3.7	B2/1000		G2/1000
BVH	(80°-90°)	75.4	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3
2.5°	4696.3	4693.0	4711.6	4648.3	4605.1	4546.9	4470.0	4372.0	4266.5	4155.0	4106.9
5°	5119.5	5089.9	5109.3	5062.1	5014.7	4927.0	4812.9	4653.3	4458.2	4236.1	4117.8
7.5°	5052.7	5032.4	5082.4	5124.6	5160.1	5149.0	5065.4	4898.2	4646.5	4324.0	4152.5
10°	4514.8	4492.0	4562.1	4708.2	4922.7	5109.3	5210.7	5106.9	4839.1	4420.2	4186.3
12.5°	4040.1	4029.2	4075.6	4193.9	4432.0	4790.1	5192.1	5289.2	5039.2	4534.2	4231.9
15°	3837.5	3824.0	3853.6	3913.6	4065.6	4399.1	5023.2	5414.3	5236.0	4666.0	4304.5
17.5°	3792.7	3777.5	3790.2	3821.4	3919.4	4173.6	4768.2	5475.9	5441.2	4812.9	4365.3
20°	3875.5	3862.8	3864.6	3862.8	3931.3	4133.1	4590.8	5452.2	5620.3	4948.1	4424.4
22.5°	4075.6	4054.5	4055.4	4010.6	4047.8	4204.0	4544.3	5388.8	5779.9	5066.3	4469.2
25°	4401.7	4363.6	4371.2	4257.2	4247.1	4362.8	4617.0	5339.9	5938.6	5160.9	4477.6
27.5°	4847.5	4804.5	4781.6	4611.9	4530.8	4588.3	4764.8	5356.8	6089.0	5242.8	4456.5
30°	5404.9	5352.5	5306.1	5065.4	4918.5	4897.3	4994.5	5468.3	6266.3	5328.9	4420.2
32.5°	6088.1	6027.3	5942.8	5623.7	5416.7	5306.1	5291.8	5666.7	6474.1	5438.8	4401.7
35°	6901.4	6822.0	6702.1	6289.1	6027.3	5801.0	5683.6	5953.0	6758.6	5604.2	4422.8
37.5°	7739.2	7649.7	7539.9	7048.3	6726.6	6393.0	6161.6	6341.5	7137.9	5828.9	4478.5
40°	8511.9	8411.5	8309.3	7871.8	7526.4	7124.4	6746.9	6833.0	7601.5	6097.4	4573.0
42.5°	8967.9	8893.6	8854.8	8618.3	8351.5	7943.5	7474.8	7415.8	8122.6	6406.6	4681.2
45°	8947.6	8917.3	9037.2	9135.2	9071.9	8845.4	8327.8	8060.1	8645.4	6674.2	4780.8
47.5°	8469.7	8490.0	8757.7	9308.3	9550.6	9668.9	9299.0	8692.6	9099.6	6874.4	4825.6
50°	7169.2	7186.0	7805.9	8993.2	9673.9	10340.3	10262.6	9310.0	9451.8	6996.9	4815.4
52.5°	6139.6	6150.6	6416.7	8059.3	9266.9	10678.1	11130.8	9891.9	9709.4	7030.6	4758.9
55°	4624.6	4662.6	4960.7	6322.9	8207.9	10410.4	11659.5	10491.5	9872.4	7034.0	4699.7
57.5°	2701.6	2743.0	3111.2	4291.9	6379.5	9477.2	11739.6	11023.5	9983.1	7007.0	4664.3
60°	1323.4	1341.1	1501.5	2255.7	3933.7	7679.2	11094.5	11281.0	10044.7	6992.7	4662.6
62.5°	891.9	889.3	896.1	1113.0	1938.2	4933.6	9750.0	10830.2	10011.8	6937.7	4645.7
65°	766.8	757.6	732.2	781.2	1004.1	2256.5	7533.1	9483.9	9761.0	6800.1	4530.0
67.5°	663.0	663.8	664.6	649.4	717.0	1041.3	4603.5	7470.6	8860.7	6148.1	4084.1
70°	548.9	556.6	560.0	560.0	584.5	683.3	1965.2	5120.3	6989.3	4820.5	3289.4
72.5°	500.0	483.9	485.6	477.1	477.1	520.2	791.3	2902.6	4403.3	2711.7	2007.5
75°	408.0	418.0	419.7	413.8	394.4	396.9	469.6	1217.8	1884.2	1124.9	992.3
77.5°	352.2	352.2	355.6	351.4	336.1	297.2	313.3	472.1	641.0	461.1	495.7
80°	282.9	282.1	296.4	304.8	281.3	219.6	200.2	261.0	284.6	202.6	257.6
82.5°	137.7	146.1	203.6	232.3	213.7	158.8	122.5	162.2	152.0	89.5	115.7
85°	80.3	76.1	91.2	129.3	122.5	87.8	59.1	84.5	79.3	45.6	46.4
87.5°	25.3	23.7	18.6	43.9	35.5	24.5	16.1	24.5	21.9	10.1	10.1
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3	4093.3
2.5°	4046.9	3947.3	3848.5	3758.1	3703.2	3667.8	3632.3	3592.6	3577.4	3554.6
5°	4006.4	3813.8	3642.4	3494.6	3360.4	3254.8	3148.4	3062.2	3023.3	3049.6
7.5°	3982.7	3704.0	3439.7	3168.7	2907.7	2699.1	2517.5	2390.0	2332.6	2346.9
10°	3961.6	3579.9	3177.1	2748.9	2373.9	2115.5	1929.8	1832.6	1796.3	1803.9
12.5°	3942.3	3440.6	2860.4	2297.1	1898.5	1727.8	1674.6	1675.6	1682.3	1687.4
15°	3938.9	3272.5	2506.5	1901.9	1641.7	1630.8	1688.2	1724.5	1743.9	1749.9
17.5°	3933.7	3071.5	2145.9	1632.4	1579.2	1653.5	1706.7	1730.4	1745.6	1746.5
20°	3913.6	2816.5	1813.2	1504.1	1565.7	1630.0	1662.9	1681.4	1694.1	1698.3
22.5°	3851.0	2532.7	1553.9	1446.7	1511.7	1563.2	1602.1	1623.2	1630.8	1635.8
25°	3738.7	2215.1	1374.8	1391.7	1436.5	1501.5	1532.8	1537.0	1534.5	1542.1
27.5°	3591.7	1874.8	1263.4	1317.4	1374.8	1430.6	1447.5	1444.9	1439.9	1448.3
30°	3414.4	1569.1	1192.5	1233.8	1312.4	1363.0	1378.2	1372.4	1362.2	1371.4
32.5°	3226.9	1319.2	1134.2	1175.6	1260.9	1310.7	1325.9	1320.0	1312.4	1320.0
35°	3052.1	1144.3	1080.1	1136.7	1220.4	1269.4	1288.7	1289.6	1289.6	1298.9
37.5°	2891.6	1042.1	1035.4	1112.2	1192.5	1236.4	1264.2	1266.0	1229.6	1232.2
40°	2743.0	999.1	1015.2	1096.1	1165.4	1207.7	1209.4	1114.8	1048.1	1046.3
42.5°	2621.4	990.7	1021.0	1094.5	1146.1	1147.7	1028.6	955.2	936.5	937.5
45°	2507.4	988.1	1034.5	1094.5	1117.2	991.5	911.2	891.9	893.5	900.3
47.5°	2379.8	978.0	1037.1	1079.3	1034.5	881.7	858.0	849.6	846.2	847.9
50°	2240.5	941.7	1005.0	1048.9	892.7	834.4	804.8	802.3	806.5	809.0
52.5°	2093.6	882.5	950.1	994.0	827.6	793.0	760.0	766.0	784.5	790.5
55°	1997.3	813.2	877.5	884.2	782.1	754.2	726.3	739.8	774.4	785.4
57.5°	1972.0	739.8	794.7	787.1	723.8	720.4	703.5	715.3	759.2	775.3
60°	1964.3	673.9	713.6	707.7	667.2	683.3	679.0	684.9	700.1	705.2
62.5°	1905.3	621.6	641.0	632.5	616.5	644.4	654.5	641.9	653.6	659.6
65°	1754.9	579.3	570.0	564.2	570.9	596.2	616.5	591.1	602.2	619.0
67.5°	1506.6	521.9	496.6	503.4	524.5	537.9	564.2	535.5	544.7	573.4
70°	1218.6	449.3	426.5	445.9	466.2	494.0	498.3	478.9	500.8	532.9
72.5°	862.2	375.8	359.8	399.4	406.2	442.5	433.3	423.9	454.4	465.4
75°	597.9	303.2	293.9	324.3	348.8	380.1	373.3	384.3	448.4	453.5
77.5°	378.3	235.6	229.7	249.2	282.9	317.5	328.5	453.5	766.0	796.4
80°	219.6	175.7	168.9	184.1	213.7	245.8	316.7	556.6	505.0	499.1
82.5°	122.5	120.7	112.3	116.5	142.7	177.3	447.6	391.9	318.4	328.5
85°	57.4	70.9	60.8	58.3	80.3	207.8	299.0	223.8	148.6	145.2
87.5°	15.2	13.5	13.5	15.2	33.8	179.1	119.1	95.4	56.6	54.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)