

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: P961011

Luminaire Tested: **NAV-SB1D-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9079.5 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

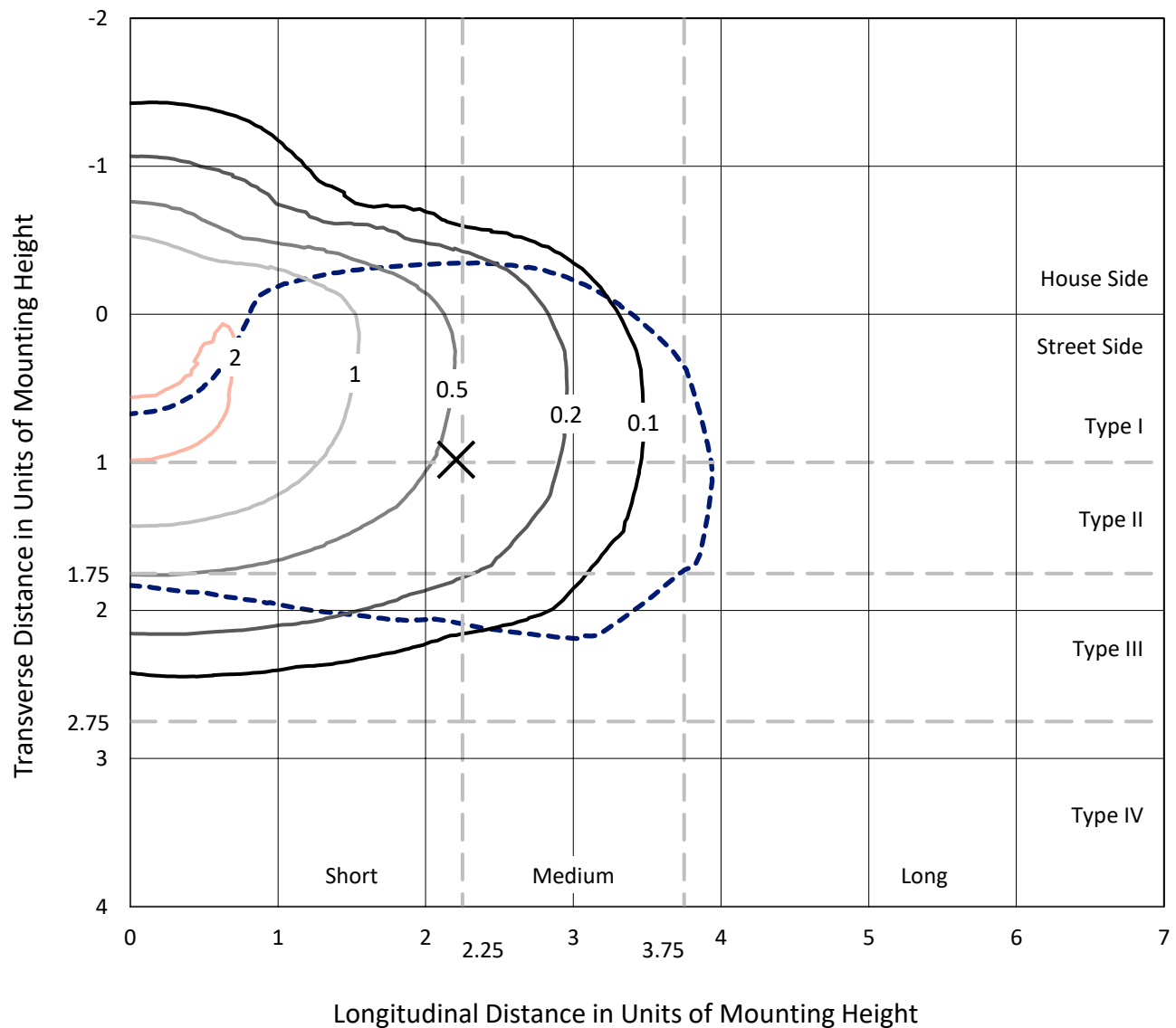
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

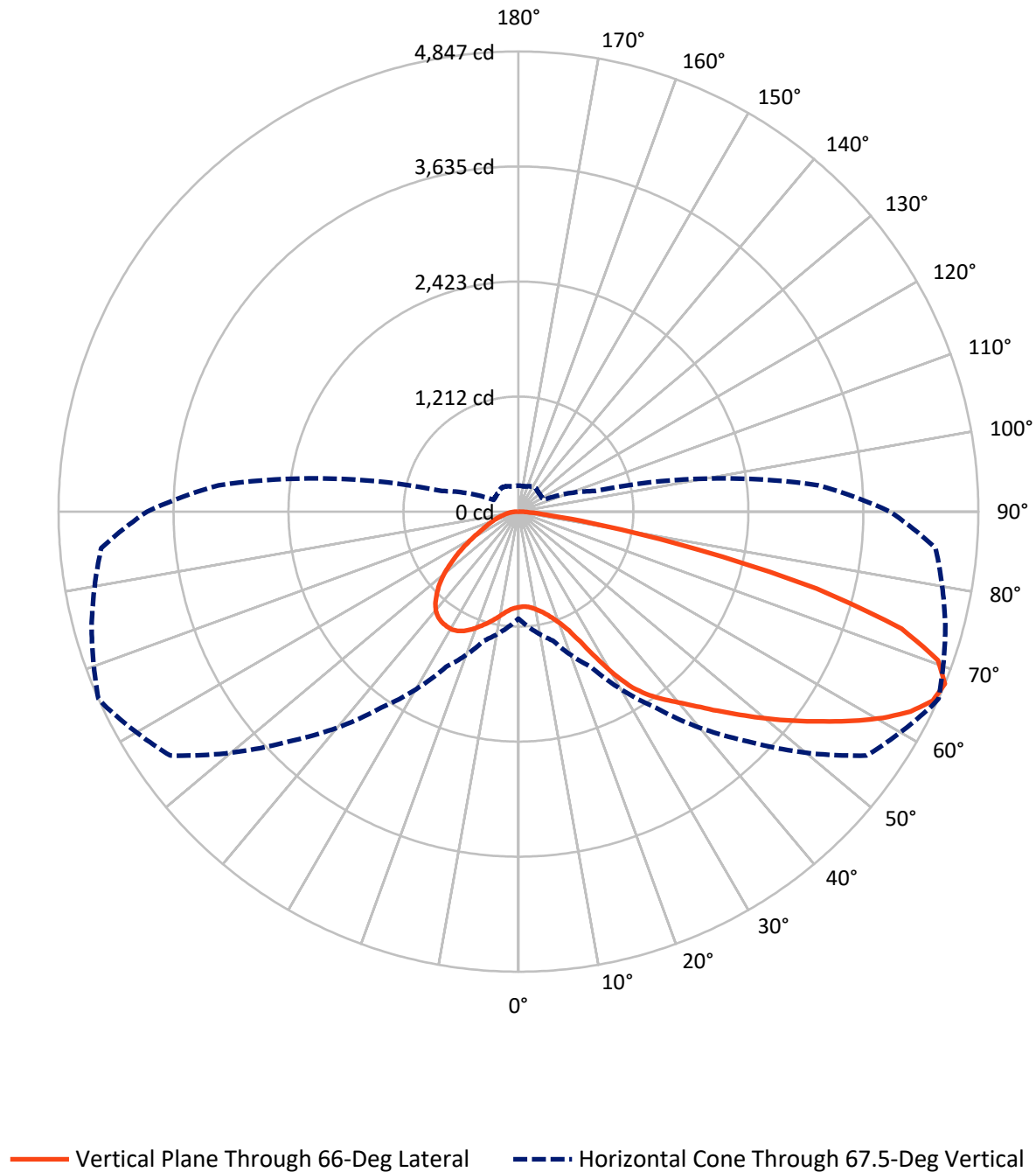
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2257.6	0.0	2257.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6821.9	0.0	6821.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	9079.5	0.0	9079.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.8	1.1
10°-20°	329.9	3.6
20°-30°	635.8	7.0
30°-40°	1114.8	12.3
40°-50°	1657.3	18.3
50°-60°	2100.8	23.1
60°-70°	2055.6	22.6
70°-80°	980.6	10.8
80°-90°	104.8	1.2
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°	9079.5	100.0
0°-180°	9079.5	100.0

Coefficient of Utilization



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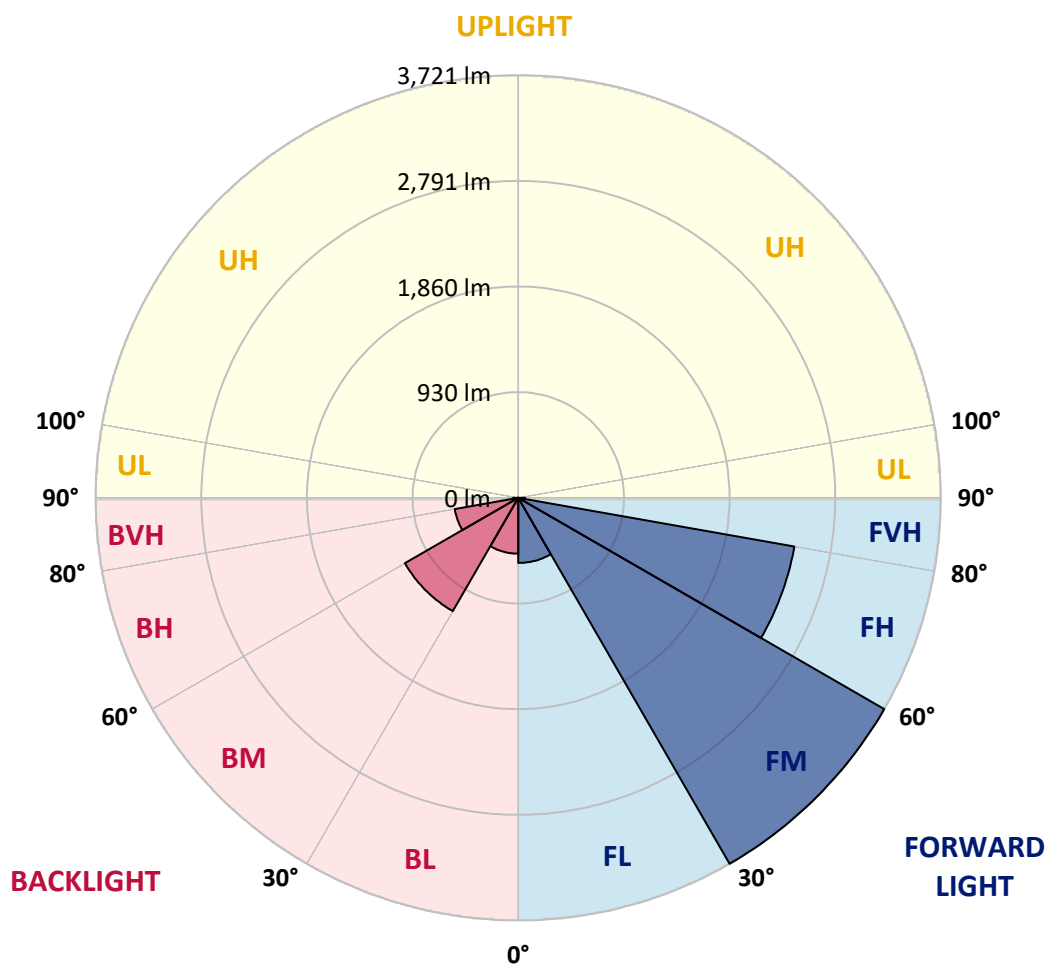
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	573.7	6.3			
FM	(30°-60°)	3720.7	41.0			
FH	(60°-80°)	2468.0	27.2			G2/5000
FVH	(80°-90°)	59.4	0.7			G1/100
BL	(0°-30°)	491.8	5.4	B1/500		
BM	(30°-60°)	1152.3	12.7	B2/2500		
BH	(60°-80°)	568.1	6.3	B2/1000		G2/1000
BVH	(80°-90°)	45.4	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1
2.5°	996.5	1002.2	1000.8	998.5	997.9	999.0	1000.4	1001.7	1001.3	1003.7	1007.5
5°	993.6	999.4	999.0	999.0	1000.8	1004.6	1007.1	1009.4	1007.1	1009.9	1015.2
7.5°	995.6	999.9	1001.7	1003.7	1008.5	1015.6	1021.3	1026.6	1023.8	1027.0	1033.7
10°	1019.9	1023.3	1025.2	1025.2	1028.5	1036.6	1042.3	1051.9	1049.5	1054.7	1063.3
12.5°	1064.3	1067.6	1067.6	1065.7	1068.0	1073.4	1075.2	1085.8	1081.5	1090.0	1098.6
15°	1118.7	1125.3	1120.1	1116.7	1117.7	1123.0	1122.5	1130.6	1126.3	1133.4	1141.0
17.5°	1178.8	1187.4	1178.8	1178.2	1176.4	1182.1	1182.5	1189.7	1182.1	1187.4	1192.6
20°	1249.9	1261.8	1254.6	1257.0	1252.8	1255.1	1257.5	1267.9	1256.0	1259.8	1258.4
22.5°	1350.0	1364.4	1356.7	1365.8	1362.9	1361.0	1360.5	1379.1	1360.5	1361.9	1348.1
25°	1496.0	1513.2	1499.8	1512.2	1512.2	1518.4	1525.6	1549.4	1518.4	1509.3	1473.5
27.5°	1711.6	1728.8	1702.5	1710.2	1707.8	1723.0	1715.4	1774.6	1741.2	1726.4	1654.4
30°	1971.2	2001.6	1952.0	1950.2	1947.7	1972.1	1983.1	2022.2	1988.3	1973.5	1886.7
32.5°	2251.6	2283.6	2224.5	2207.2	2198.2	2213.0	2204.0	2235.4	2212.1	2189.1	2081.8
35°	2548.4	2579.8	2523.5	2490.1	2453.8	2422.9	2390.4	2398.6	2376.6	2341.8	2230.6
37.5°	2828.8	2886.6	2827.0	2791.2	2724.3	2663.8	2573.2	2535.4	2514.9	2483.0	2370.9
40°	3114.6	3147.5	3102.2	3071.6	2999.1	2904.2	2759.2	2679.6	2651.9	2620.8	2525.9
42.5°	3325.0	3356.5	3332.2	3311.2	3254.4	3144.2	2956.7	2857.0	2816.9	2782.1	2701.5
45°	3492.0	3515.3	3500.1	3507.7	3483.4	3376.5	3161.3	3047.3	3005.8	2963.4	2899.9
47.5°	3559.2	3584.0	3608.3	3653.6	3695.1	3616.4	3381.3	3253.5	3209.5	3166.1	3103.6
50°	3551.5	3576.8	3647.5	3743.8	3872.7	3846.4	3613.1	3472.8	3432.3	3382.7	3325.0
52.5°	3490.5	3519.1	3609.7	3770.1	3975.2	4018.6	3849.3	3699.4	3661.3	3602.2	3544.4
55°	3330.2	3347.3	3483.4	3710.4	3999.6	4138.8	4080.6	3940.8	3902.7	3820.2	3757.1
57.5°	3033.0	3057.8	3255.8	3549.7	3938.5	4220.3	4283.8	4194.6	4157.9	4039.1	3973.3
60°	2645.2	2684.8	2911.4	3279.7	3783.0	4219.9	4468.4	4444.1	4413.5	4254.7	4186.0
62.5°	2206.3	2252.1	2470.1	2898.0	3511.0	4100.2	4583.9	4653.1	4637.3	4453.6	4365.9
65°	1694.4	1725.9	1943.0	2404.2	3087.9	3843.0	4597.2	4795.7	4798.5	4604.9	4459.9
67.5°	1128.2	1218.8	1407.2	1804.2	2521.2	3422.8	4479.9	4819.0	4846.7	4656.9	4412.6
70°	550.5	669.7	854.3	1172.6	1804.2	2778.3	4173.2	4627.3	4688.9	4505.2	4131.2
72.5°	228.5	267.1	367.8	578.6	1035.7	1874.7	3556.9	4107.3	4221.4	3991.9	3473.3
75°	154.1	167.0	210.3	296.7	471.8	924.6	2565.1	3062.6	3246.3	3014.9	2464.4
77.5°	118.8	126.9	153.1	207.6	280.5	349.6	1372.9	1845.7	1940.6	1796.5	1282.3
80°	93.5	99.7	114.5	151.2	199.0	187.0	468.0	836.3	891.1	747.5	412.2
82.5°	81.1	83.4	82.0	102.6	132.1	109.3	153.6	308.6	340.6	247.1	134.5
85°	58.6	65.4	68.3	63.4	70.1	55.4	62.9	109.3	120.2	107.3	75.8
87.5°	23.9	35.3	43.5	41.0	25.7	15.8	19.6	32.0	36.7	40.1	24.8
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°	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1
2.5°	1008.0	1011.4	1013.7	1016.6	1018.4	1021.3	1027.0	1030.4	1030.8	1033.3	1032.8
5°	1017.0	1021.8	1027.0	1034.7	1043.2	1050.4	1061.4	1069.1	1071.9	1074.3	1073.8
7.5°	1036.6	1043.2	1052.8	1066.2	1078.6	1088.1	1101.5	1110.6	1119.6	1123.0	1123.4
10°	1065.7	1075.2	1089.1	1107.2	1120.5	1132.9	1146.8	1154.5	1163.5	1167.3	1169.2
12.5°	1102.0	1112.0	1130.1	1155.4	1167.8	1176.4	1181.1	1179.3	1181.1	1184.5	1185.4
15°	1143.5	1154.5	1175.0	1202.1	1210.7	1203.1	1192.6	1183.1	1181.6	1182.5	1185.9
17.5°	1192.6	1200.7	1224.6	1247.4	1241.3	1209.8	1186.8	1171.6	1164.0	1161.6	1164.9
20°	1261.3	1261.3	1280.8	1295.2	1253.7	1200.3	1164.5	1139.7	1123.9	1117.2	1115.8
22.5°	1344.8	1337.1	1349.5	1339.6	1251.3	1173.5	1123.9	1081.0	1057.1	1047.6	1046.1
25°	1450.7	1441.7	1438.3	1376.3	1234.1	1131.1	1050.4	998.5	977.4	972.2	973.1
27.5°	1610.5	1587.6	1544.2	1396.3	1202.6	1064.3	964.5	916.4	904.5	905.0	906.4
30°	1823.3	1777.5	1671.1	1399.6	1151.1	969.9	876.8	842.4	836.7	839.1	847.3
32.5°	2020.3	1976.8	1800.8	1384.4	1071.9	877.3	798.1	775.2	766.6	769.5	773.3
35°	2174.8	2162.9	1921.1	1362.9	974.6	790.5	727.4	708.0	691.3	687.4	690.2
37.5°	2320.8	2316.0	2011.2	1332.8	878.2	728.9	670.8	644.9	620.6	607.3	607.7
40°	2481.1	2476.3	2070.4	1286.6	792.8	675.5	619.7	585.8	555.8	531.5	533.8
42.5°	2661.4	2633.2	2098.5	1220.3	720.4	630.2	578.2	532.4	492.8	470.4	471.8
45°	2858.4	2795.0	2098.0	1135.8	659.3	588.7	533.8	468.9	432.2	411.2	410.2
47.5°	3067.4	2949.5	2072.2	1042.3	600.1	542.8	465.1	415.5	391.1	378.3	375.5
50°	3283.0	3094.1	2028.4	935.0	539.6	490.9	422.2	388.3	369.7	357.8	353.5
52.5°	3485.7	3225.3	1975.4	813.3	478.0	440.3	403.1	376.9	357.3	344.0	338.2
55°	3674.1	3338.3	1900.6	688.8	427.9	406.4	394.0	372.1	349.6	333.9	327.7
57.5°	3841.6	3411.8	1771.2	571.9	392.2	383.0	384.5	364.0	338.2	324.8	316.3
60°	3980.9	3465.7	1579.9	463.7	363.1	360.2	369.7	348.7	318.7	303.4	296.7
62.5°	4064.3	3464.7	1345.2	379.8	338.2	339.2	350.1	329.6	299.1	284.7	280.5
65°	4057.3	3379.8	1087.6	324.8	314.4	315.3	329.6	308.6	282.9	274.3	273.8
67.5°	3913.7	3172.8	834.4	289.0	288.1	292.4	309.1	294.4	272.9	271.9	273.4
70°	3524.9	2743.0	601.1	260.5	261.0	267.1	289.0	285.3	267.6	269.6	269.1
72.5°	2826.4	2091.3	403.5	230.4	230.9	240.9	270.0	278.1	262.4	287.6	291.5
75°	1882.4	1304.2	259.5	198.4	199.0	211.8	253.3	264.2	248.0	286.7	289.0
77.5°	904.5	586.3	188.0	167.0	167.0	178.9	218.9	236.6	211.4	222.7	204.2
80°	312.4	220.4	147.9	134.5	131.7	139.8	184.6	205.1	182.2	167.9	157.4
82.5°	123.1	114.5	118.8	104.4	94.9	100.1	143.6	169.3	134.1	121.2	120.6
85°	70.6	74.4	83.9	69.2	54.8	61.5	105.5	121.7	101.2	89.2	91.1
87.5°	19.1	26.2	38.6	35.8	24.8	26.2	50.1	67.2	58.2	44.8	46.2
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)