

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: P961414

Luminaire Tested: **NAV-SB2A-735-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961414
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-SB2A-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9201.4 lumens
Efficiency: N/A
Efficacy: 160.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

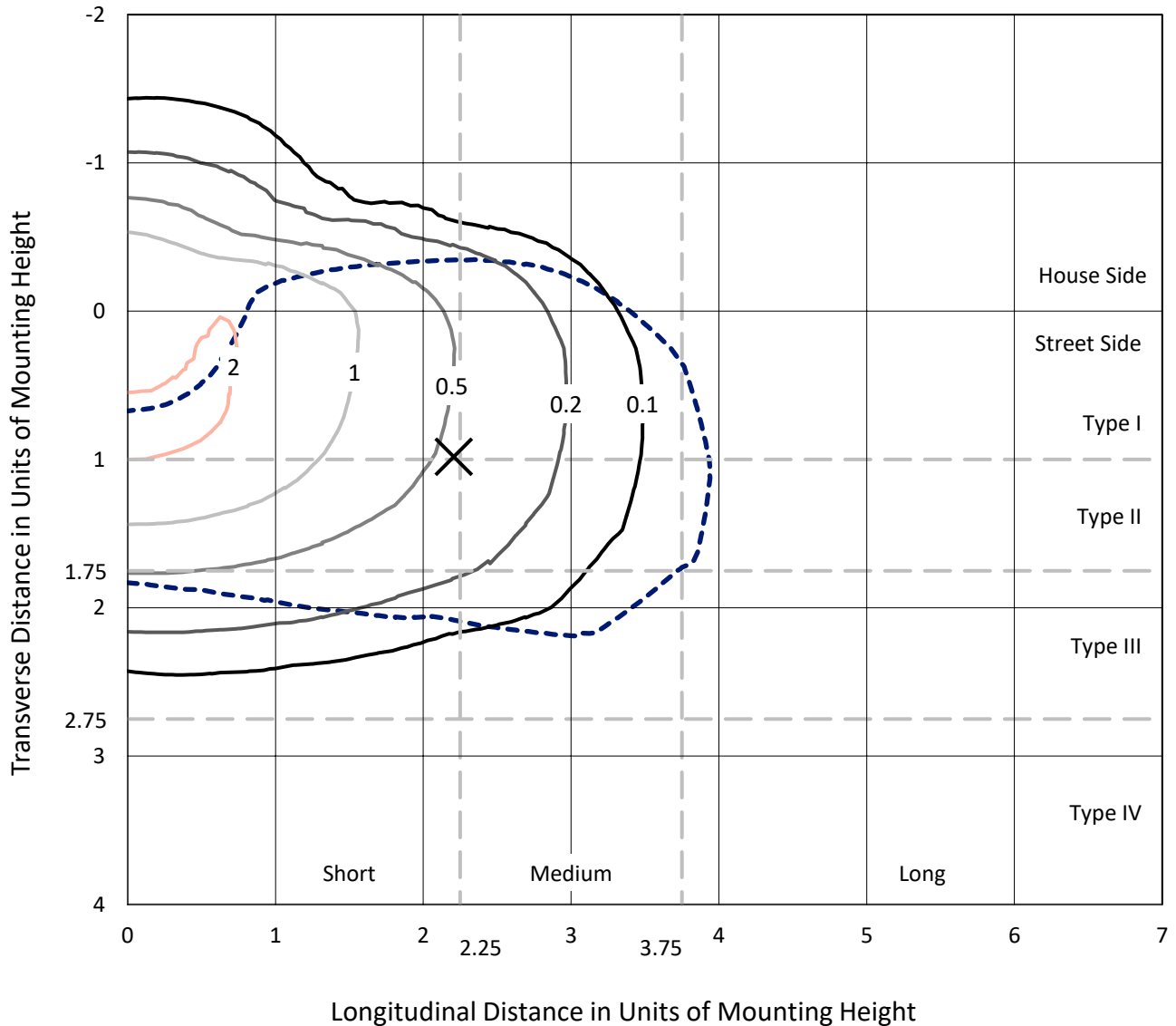
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

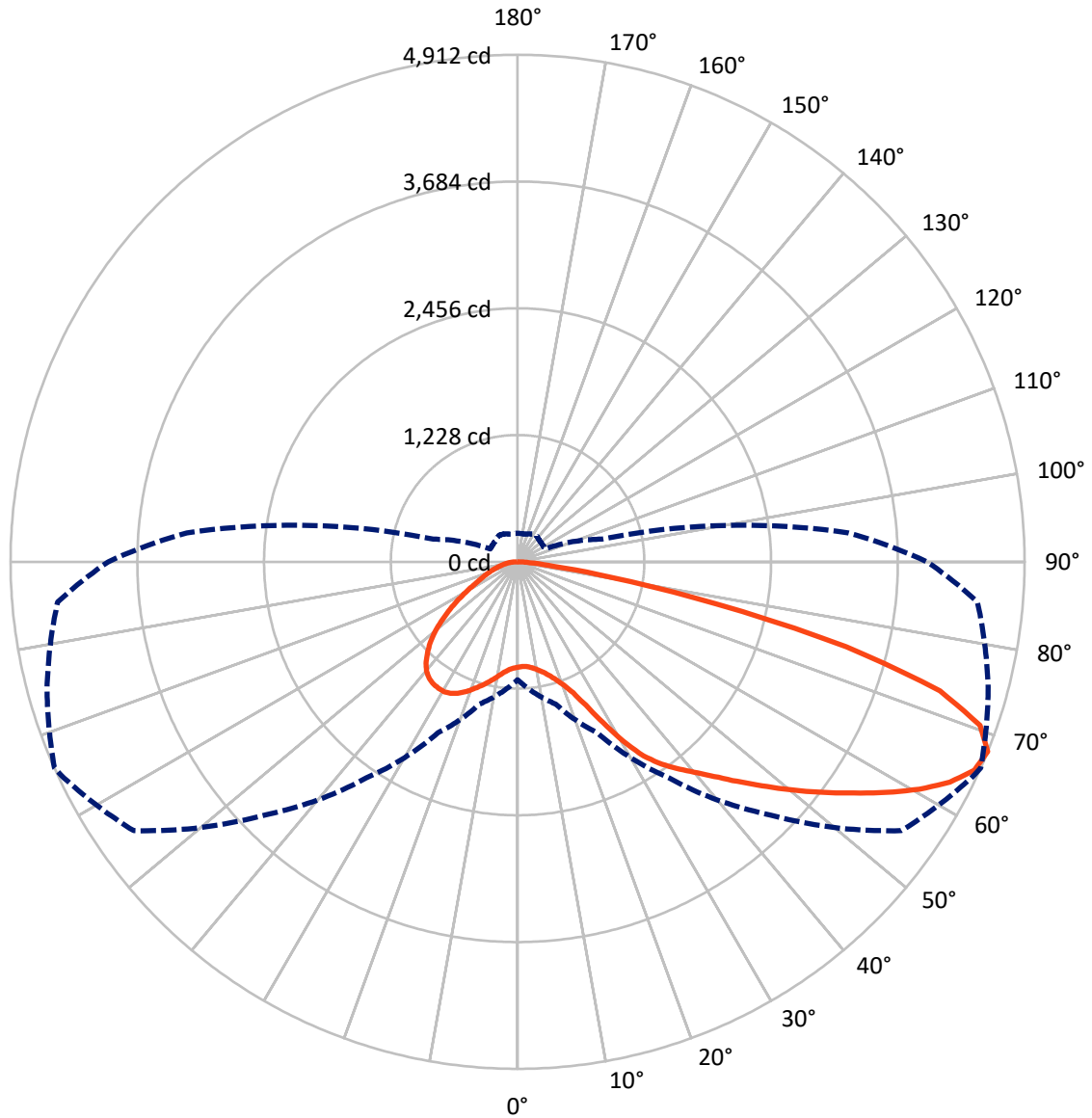
✕ Max cd
 - - - 1/2 Max cd



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



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2287.9	0.0	2287.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6913.5	0.0	6913.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	9201.4	0.0	9201.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	1.1
10°-20°	334.3	3.6
20°-30°	644.3	7.0
30°-40°	1129.8	12.3
40°-50°	1679.6	18.3
50°-60°	2129.1	23.1
60°-70°	2083.2	22.6
70°-80°	993.7	10.8
80°-90°	106.2	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°	9201.4	100.0
0°-180°	9201.4	100.0

Coefficient of Utilization



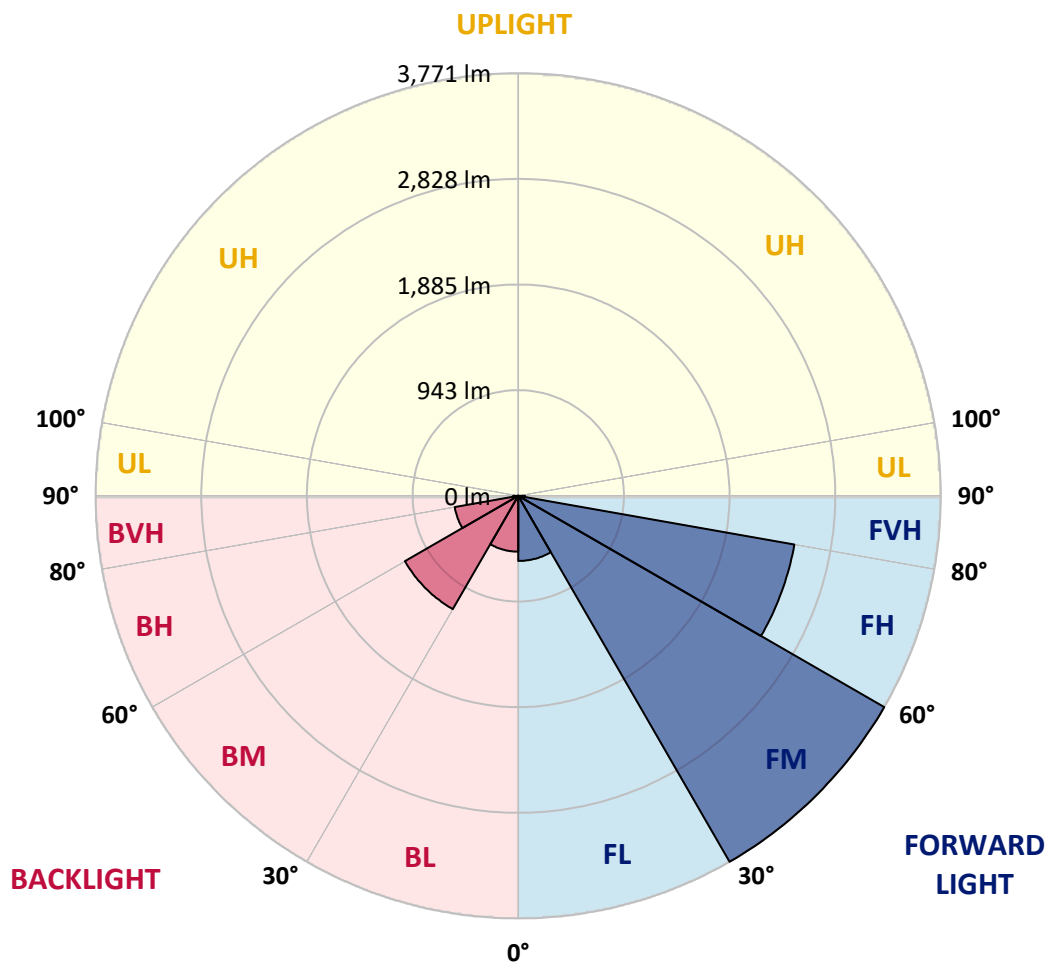
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	581.4	6.3			
FM (30°-60°)	3770.7	41.0			
FH (60°-80°)	2501.2	27.2			G2/5000
FVH (80°-90°)	60.2	0.7			G1/100
BL (0°-30°)	498.4	5.4	B1/500		
BM (30°-60°)	1167.8	12.7	B2/2500		
BH (60°-80°)	575.7	6.3	B2/1000		G2/1000
BVH (80°-90°)	46.0	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°	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6
2.5°	1009.9	1015.8	1014.2	1011.9	1011.4	1012.3	1013.8	1015.3	1014.7	1017.2	1021.0
5°	1007.1	1012.8	1012.3	1012.3	1014.2	1018.1	1020.6	1023.0	1020.6	1023.5	1028.8
7.5°	1008.9	1013.3	1015.3	1017.2	1022.0	1029.3	1035.0	1040.4	1037.5	1040.9	1047.7
10°	1033.6	1037.0	1038.9	1038.9	1042.3	1050.5	1056.4	1066.0	1063.5	1068.9	1077.6
12.5°	1078.6	1082.0	1082.0	1080.0	1082.4	1087.7	1089.7	1100.3	1095.9	1104.6	1113.4
15°	1133.6	1140.4	1135.2	1131.7	1132.7	1138.1	1137.5	1145.7	1141.4	1148.7	1156.4
17.5°	1194.6	1203.4	1194.6	1194.1	1192.2	1198.0	1198.4	1205.7	1198.0	1203.4	1208.6
20°	1266.6	1278.7	1271.5	1273.9	1269.6	1271.9	1274.4	1285.0	1272.9	1276.7	1275.3
22.5°	1368.2	1382.6	1374.9	1384.2	1381.2	1379.2	1378.8	1397.7	1378.8	1380.3	1366.2
25°	1516.1	1533.5	1520.0	1532.6	1532.6	1538.8	1546.1	1570.2	1538.8	1529.6	1493.3
27.5°	1734.6	1752.0	1725.4	1733.2	1730.7	1746.2	1738.5	1798.5	1764.5	1749.6	1676.6
30°	1997.6	2028.6	1978.2	1976.3	1973.9	1998.5	2009.7	2049.4	2015.0	2000.0	1912.0
32.5°	2281.9	2314.2	2254.3	2237.0	2227.7	2242.7	2233.6	2265.5	2241.8	2218.5	2109.8
35°	2582.6	2614.5	2557.5	2523.5	2486.9	2455.4	2422.6	2430.8	2408.5	2373.3	2260.6
37.5°	2866.8	2925.4	2864.9	2828.7	2760.9	2699.5	2607.7	2569.6	2548.8	2516.4	2402.7
40°	3156.4	3189.8	3143.9	3112.9	3039.4	2943.2	2796.3	2715.5	2687.4	2656.1	2559.8
42.5°	3369.6	3401.6	3376.9	3355.6	3298.0	3186.4	2996.4	2895.4	2854.7	2819.5	2737.8
45°	3538.8	3562.5	3547.0	3554.8	3530.1	3421.9	3203.8	3088.2	3046.2	3003.1	2938.9
47.5°	3607.0	3632.2	3656.8	3702.7	3744.8	3665.0	3426.7	3297.1	3252.6	3208.7	3145.3
50°	3599.3	3624.9	3696.5	3794.1	3924.6	3898.1	3661.6	3519.5	3478.4	3428.1	3369.6
52.5°	3537.4	3566.4	3658.2	3820.7	4028.6	4072.5	3900.9	3749.1	3710.5	3650.5	3592.0
55°	3374.9	3392.3	3530.1	3760.2	4053.3	4194.4	4135.5	3993.8	3955.1	3871.4	3807.7
57.5°	3073.8	3098.9	3299.6	3597.3	3991.3	4277.0	4341.4	4251.0	4213.8	4093.3	4026.6
60°	2680.7	2720.9	2950.5	3323.7	3833.7	4276.6	4528.4	4503.8	4472.9	4311.9	4242.3
62.5°	2235.9	2282.4	2503.3	2936.9	3558.2	4155.2	4645.5	4715.5	4699.6	4513.5	4424.5
65°	1717.2	1749.2	1969.1	2436.6	3129.3	3894.7	4659.0	4860.1	4863.0	4666.7	4519.7
67.5°	1143.4	1235.2	1426.2	1828.4	2555.0	3468.7	4540.0	4883.8	4911.8	4719.4	4471.9
70°	557.9	678.8	865.8	1188.3	1828.4	2815.6	4229.3	4689.5	4751.8	4565.7	4186.6
72.5°	231.5	270.7	372.7	586.4	1049.6	1899.9	3604.6	4162.5	4278.0	4045.5	3520.0
75°	156.1	169.2	213.2	300.7	478.2	937.0	2599.5	3103.7	3289.8	3055.4	2497.5
77.5°	120.3	128.6	155.2	210.3	284.2	354.3	1391.3	1870.4	1966.7	1820.7	1299.5
80°	94.7	101.1	116.0	153.2	201.6	189.5	474.3	847.5	903.1	757.6	417.7
82.5°	82.2	84.6	83.1	103.9	133.9	110.7	155.7	312.8	345.2	250.4	136.3
85°	59.4	66.2	69.1	64.3	71.0	56.1	63.9	110.7	121.9	108.8	76.9
87.5°	24.2	35.8	44.0	41.6	26.1	16.0	19.8	32.4	37.2	40.6	25.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6	1020.6
2.5°	1021.5	1024.9	1027.4	1030.2	1032.2	1035.0	1040.9	1044.3	1044.8	1047.1	1046.6
5°	1030.7	1035.6	1040.9	1048.6	1057.3	1064.6	1075.6	1083.4	1086.3	1088.8	1088.2
7.5°	1050.5	1057.3	1066.9	1080.6	1093.1	1102.7	1116.3	1125.4	1134.7	1138.1	1138.6
10°	1080.0	1089.7	1103.7	1122.1	1135.6	1148.2	1162.2	1169.9	1179.2	1183.0	1184.9
12.5°	1116.7	1126.9	1145.3	1171.0	1183.5	1192.2	1197.0	1195.0	1197.0	1200.4	1201.4
15°	1158.9	1169.9	1190.7	1218.3	1227.0	1219.2	1208.6	1198.9	1197.5	1198.4	1201.8
17.5°	1208.6	1216.9	1241.0	1264.2	1258.0	1226.0	1202.8	1187.4	1179.6	1177.2	1180.6
20°	1278.3	1278.3	1298.1	1312.5	1270.5	1216.4	1180.1	1155.0	1139.0	1132.2	1130.8
22.5°	1362.8	1355.2	1367.7	1357.5	1268.1	1189.3	1139.0	1095.5	1071.3	1061.7	1060.2
25°	1470.2	1460.9	1457.6	1394.7	1250.7	1146.3	1064.6	1011.9	990.6	985.2	986.3
27.5°	1632.1	1608.9	1565.0	1415.0	1218.7	1078.6	977.5	928.8	916.7	917.1	918.5
30°	1847.8	1801.3	1693.5	1418.4	1166.6	982.9	888.6	853.7	848.0	850.3	858.6
32.5°	2047.4	2003.4	1825.0	1402.9	1086.3	889.1	808.8	785.6	776.9	779.8	783.7
35°	2204.1	2192.0	1946.9	1381.2	987.7	801.0	737.3	717.4	700.5	696.7	699.6
37.5°	2352.0	2347.1	2038.2	1350.7	890.0	738.7	679.7	653.6	628.9	615.4	615.9
40°	2514.4	2509.6	2098.2	1303.9	803.5	684.6	628.0	593.7	563.2	538.5	541.0
42.5°	2697.2	2668.6	2126.7	1236.7	730.0	638.7	585.9	539.6	499.4	476.7	478.2
45°	2896.9	2832.5	2126.2	1151.1	668.1	596.6	541.0	475.2	438.0	416.8	415.7
47.5°	3108.6	2989.2	2100.1	1056.4	608.1	550.1	471.4	421.1	396.5	383.3	380.5
50°	3327.0	3135.7	2055.6	947.5	546.7	497.4	427.8	393.5	374.6	362.5	358.2
52.5°	3532.6	3268.6	2001.9	824.3	484.4	446.2	408.6	381.9	362.1	348.6	342.8
55°	3723.5	3383.2	1926.1	698.1	433.7	411.9	399.3	377.1	354.3	338.5	332.1
57.5°	3893.3	3457.6	1795.1	579.6	397.4	388.2	389.7	368.9	342.8	329.2	320.5
60°	4034.4	3512.3	1601.2	470.0	367.9	365.0	374.6	353.4	323.0	307.5	300.7
62.5°	4119.0	3511.2	1363.4	384.8	342.8	343.7	354.9	334.0	303.1	288.6	284.2
65°	4111.7	3425.2	1102.3	329.2	318.6	319.6	334.0	312.8	286.7	278.0	277.5
67.5°	3966.2	3215.4	845.5	292.9	292.0	296.3	313.2	298.3	276.5	275.5	277.1
70°	3572.2	2779.8	609.2	263.9	264.4	270.7	292.9	289.2	271.2	273.2	272.6
72.5°	2864.5	2119.4	409.0	233.5	234.0	244.2	273.7	281.9	265.9	291.5	295.4
75°	1907.7	1321.7	263.0	201.1	201.6	214.6	256.7	267.8	251.4	290.6	292.9
77.5°	916.7	594.2	190.4	169.2	169.2	181.3	221.9	239.7	214.1	225.8	206.9
80°	316.6	223.3	149.9	136.3	133.5	141.7	187.1	207.9	184.7	170.1	159.5
82.5°	124.7	116.0	120.3	105.9	96.2	101.5	145.5	171.6	135.8	122.8	122.3
85°	71.5	75.4	85.1	70.1	55.6	62.3	106.8	123.3	102.5	90.4	92.4
87.5°	19.4	26.5	39.2	36.3	25.1	26.5	50.7	68.2	58.9	45.4	46.9
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)