

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: P961347

Luminaire Tested: **NAV-SB2A-727-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-727-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8642.8 lumens
Efficiency: N/A
Efficacy: 150.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

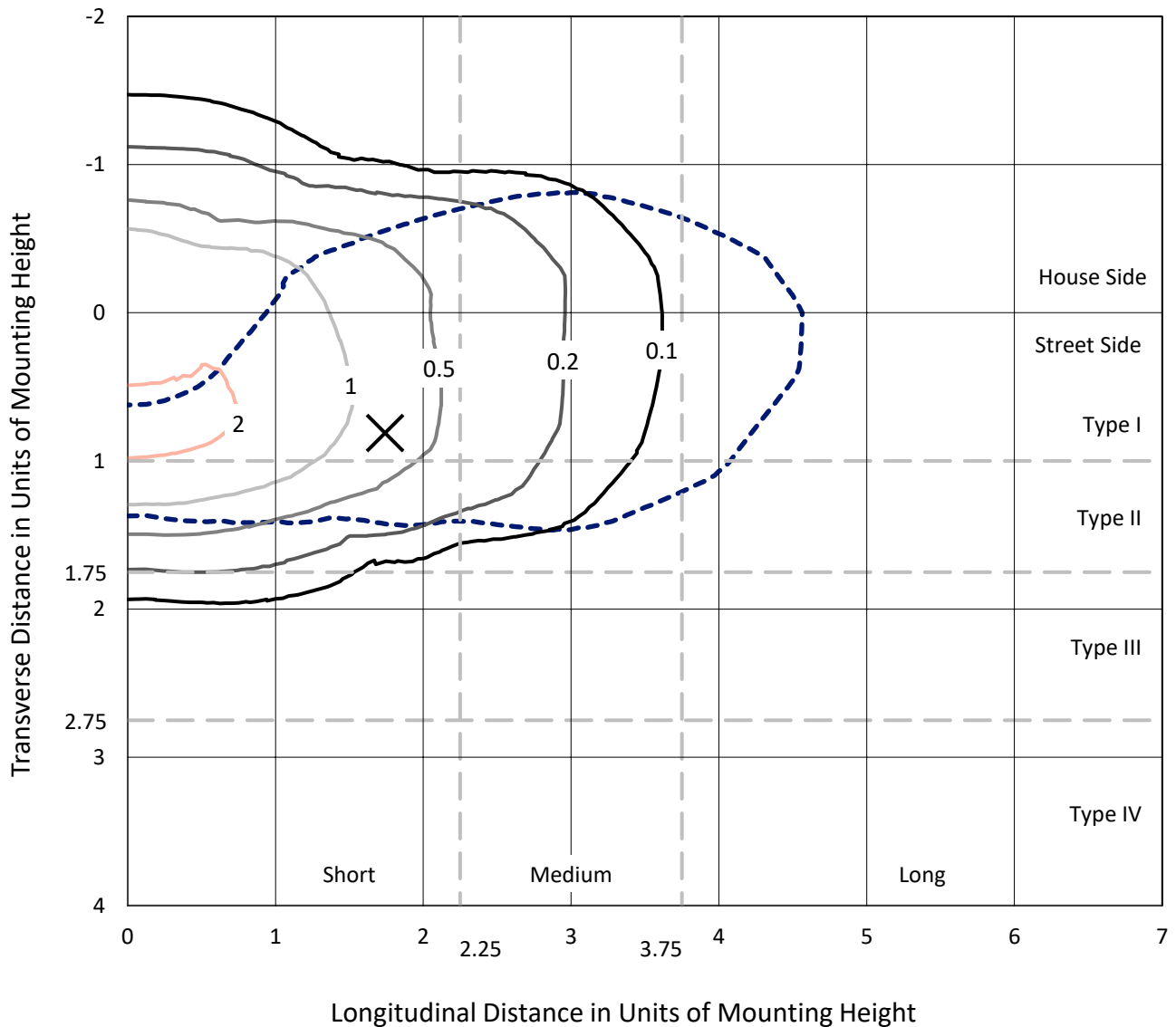
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P961347
 CATALOG NUMBER: NAV-SB2A-727-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

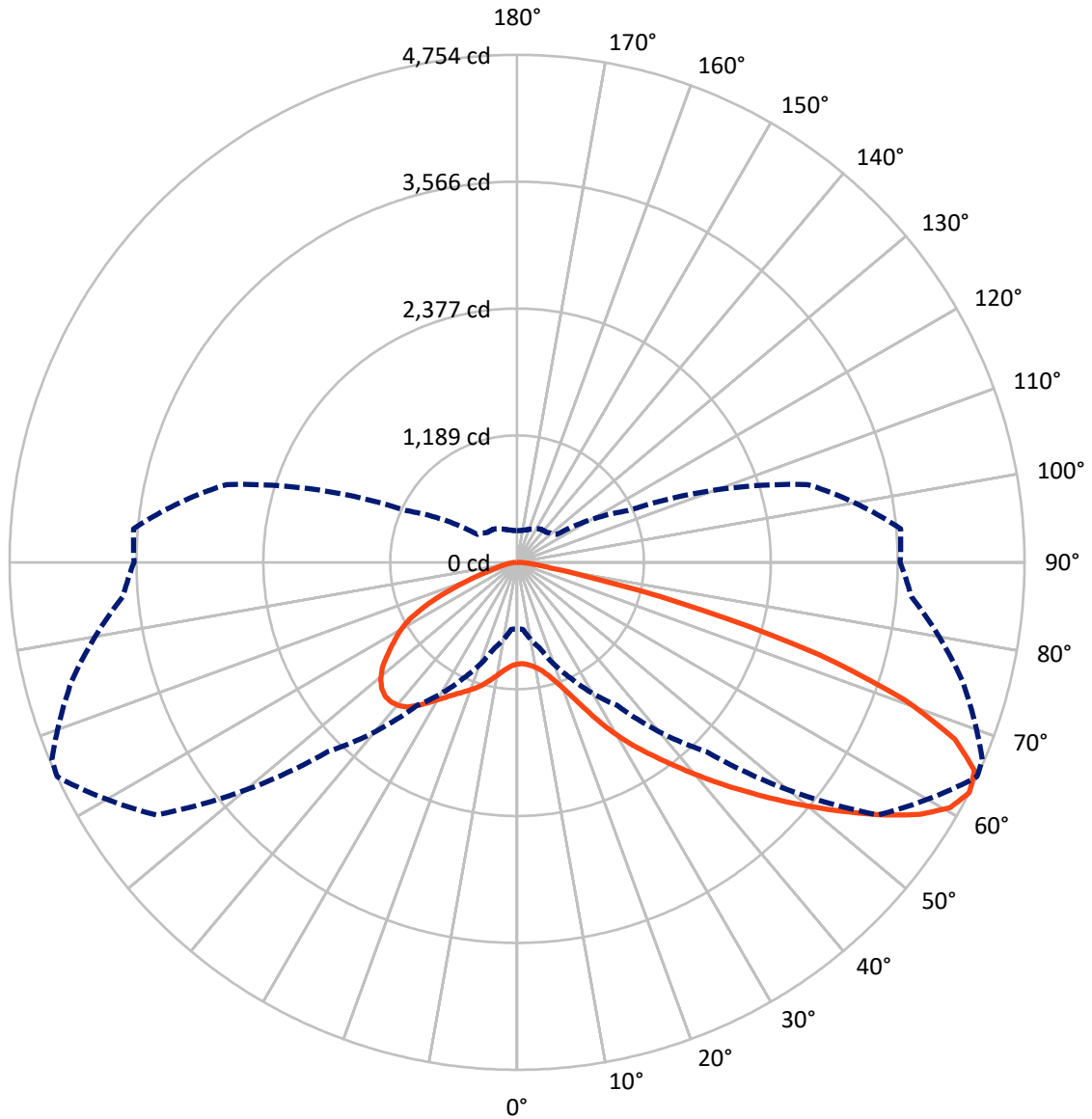
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type II - Short - N/A

REPORT NUMBER: P961347
CATALOG NUMBER: NAV-SB2A-727-U-T2U

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P961347
 CATALOG NUMBER: NAV-SB2A-727-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2727.3	0.0	2727.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	5915.5	0.0	5915.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	8642.8	0.0	8642.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.1
10°-20°	322.0	3.7
20°-30°	652.9	7.6
30°-40°	1129.8	13.1
40°-50°	1709.7	19.8
50°-60°	2004.5	23.2
60°-70°	1680.6	19.4
70°-80°	927.8	10.7
80°-90°	120.5	1.4
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°	8642.8	100.0
0°-180°	8642.8	100.0

Coefficient of Utilization



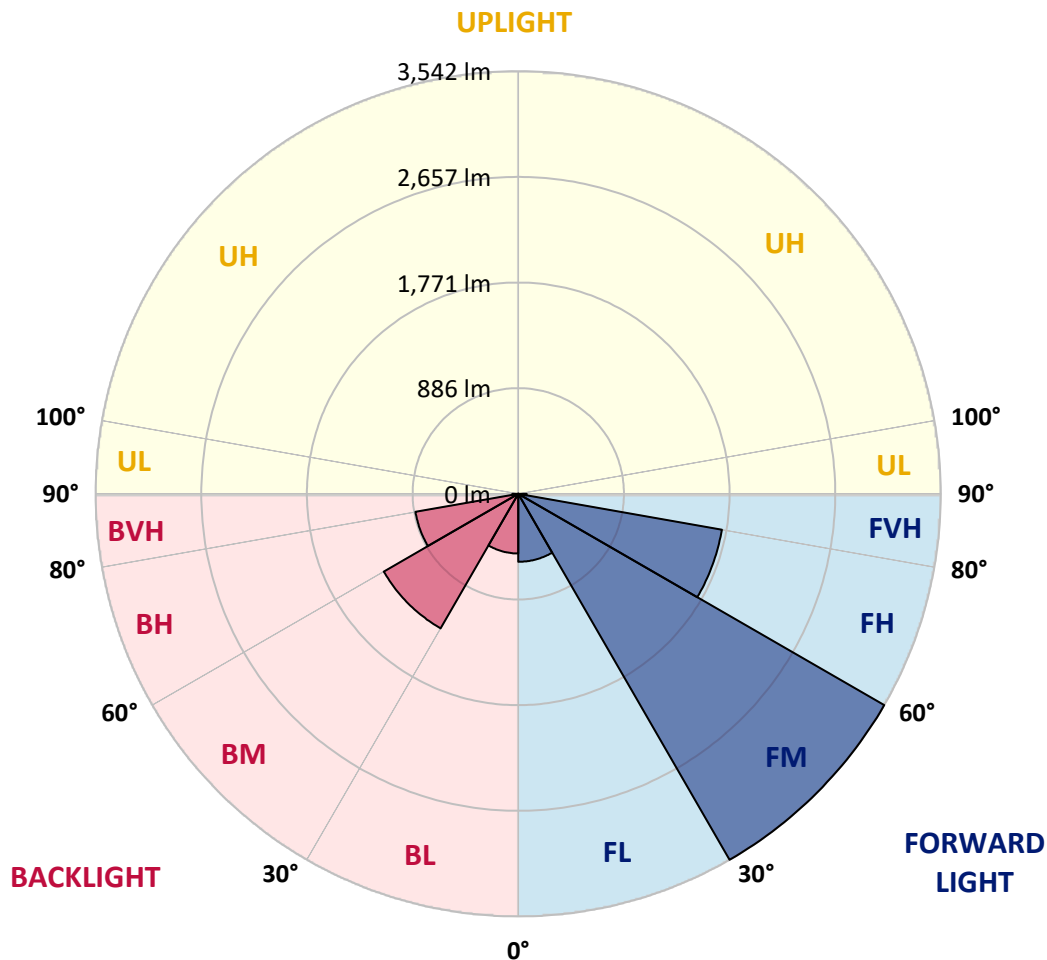
REPORT NUMBER: P961347
 CATALOG NUMBER: NAV-SB2A-727-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	569.7	6.6			
FM (30°-60°)	3542.1	41.0			
FH (60°-80°)	1733.5	20.1			G1/1800
FVH (80°-90°)	70.2	0.8			G1/100
BL (0°-30°)	500.1	5.8	B2/1000		
BM (30°-60°)	1302.0	15.1	B2/2500		
BH (60°-80°)	874.9	10.1	B2/1000		G2/1000
BVH (80°-90°)	50.3	0.6			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



REPORT NUMBER: P961347
 CATALOG NUMBER: NAV-SB2A-727-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4
2.5°	946.1	943.4	945.7	945.7	946.6	946.1	949.3	950.2	951.5	954.2	954.2
5°	936.7	936.2	940.3	943.9	947.5	950.6	954.7	960.4	961.3	964.5	968.5
7.5°	933.6	930.9	937.2	941.7	950.2	957.8	968.5	978.4	982.5	983.8	991.4
10°	957.8	953.2	959.1	961.9	969.0	976.6	989.1	1004.9	1009.3	1014.7	1023.3
12.5°	999.1	994.1	1002.7	1006.7	1013.4	1020.1	1028.6	1043.9	1046.1	1056.0	1064.1
15°	1055.5	1049.7	1055.0	1060.1	1071.2	1077.5	1086.0	1100.8	1100.8	1108.4	1114.3
17.5°	1132.2	1124.6	1128.6	1130.4	1137.5	1147.0	1161.3	1174.3	1181.1	1178.4	1170.3
20°	1246.5	1237.2	1237.2	1228.2	1225.5	1233.1	1251.9	1269.9	1277.0	1263.1	1243.4
22.5°	1418.3	1404.9	1397.2	1366.7	1354.6	1355.5	1374.3	1396.4	1402.1	1377.5	1333.1
25°	1636.6	1615.6	1605.3	1560.5	1533.1	1509.3	1524.1	1552.4	1560.5	1529.9	1458.2
27.5°	1855.0	1856.4	1846.5	1792.7	1747.4	1704.0	1696.3	1725.9	1734.4	1699.9	1611.1
30°	2161.3	2129.4	2110.6	2046.0	1981.4	1920.5	1889.1	1901.2	1903.4	1862.2	1759.1
32.5°	2425.4	2417.4	2377.0	2320.5	2237.5	2142.0	2089.6	2070.3	2066.7	2008.0	1885.5
35°	2726.3	2721.8	2679.1	2611.9	2522.2	2389.5	2294.9	2239.7	2235.2	2152.8	2010.6
37.5°	3032.1	3032.1	2990.3	2916.8	2824.0	2658.1	2514.2	2426.7	2412.3	2304.8	2137.9
40°	3276.0	3261.2	3268.8	3237.9	3131.6	2955.4	2757.7	2630.8	2611.5	2482.3	2273.3
42.5°	3414.6	3409.7	3455.4	3489.9	3446.4	3305.6	3025.8	2851.9	2824.9	2677.8	2429.5
45°	3445.5	3440.1	3521.7	3648.2	3709.2	3651.4	3317.2	3084.5	3051.8	2882.3	2596.6
47.5°	3374.2	3363.4	3483.2	3682.7	3878.2	3980.0	3632.9	3337.0	3289.4	3081.4	2768.4
50°	3159.9	3149.5	3330.7	3595.7	3935.2	4203.3	3975.5	3604.7	3532.0	3294.9	2942.0
52.5°	2694.0	2698.9	2982.7	3346.8	3860.3	4342.3	4270.6	3886.7	3799.3	3513.2	3104.7
55°	2098.5	2109.2	2458.2	2859.0	3560.7	4321.2	4471.9	4177.3	4090.3	3718.6	3272.8
57.5°	1502.5	1550.1	1877.0	2273.9	2985.4	3987.1	4515.8	4453.5	4369.2	3942.8	3437.4
60°	974.0	982.5	1318.8	1718.7	2273.3	3393.5	4426.6	4662.9	4597.0	4171.4	3575.1
62.5°	624.1	630.0	835.0	1202.1	1636.2	2510.6	4126.1	4754.0	4733.8	4322.5	3707.3
65°	458.7	454.2	561.0	794.6	1102.2	1548.4	3542.8	4710.0	4749.8	4417.1	3816.8
67.5°	382.9	376.7	429.2	550.2	812.0	879.3	2621.3	4424.3	4570.6	4406.4	3897.0
70°	348.8	343.5	375.4	408.5	633.6	588.8	1321.4	3846.4	4071.5	4284.0	3884.0
72.5°	295.5	286.1	329.5	362.7	492.8	451.5	546.1	2954.5	3229.0	3891.6	3701.1
75°	229.1	222.8	260.0	319.3	370.3	352.4	345.2	1794.1	2093.6	3009.6	3237.9
77.5°	181.6	173.1	207.2	248.9	333.1	265.9	251.5	772.5	1069.4	1921.4	2422.7
80°	136.7	129.1	157.3	196.8	256.0	200.4	162.8	315.2	403.1	973.4	1218.3
82.5°	97.3	90.6	109.9	144.4	172.2	179.8	100.0	176.7	198.6	375.4	272.1
85°	62.3	58.3	73.5	90.6	109.4	115.7	61.0	92.4	101.4	154.7	113.5
87.5°	34.0	27.8	39.5	42.1	50.6	46.2	29.1	33.6	36.3	56.1	48.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P961347
 CATALOG NUMBER: NAV-SB2A-727-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4	952.4
2.5°	956.0	957.4	961.9	963.2	966.3	970.4	973.0	975.7	975.7	978.4	978.4
5°	969.0	972.1	981.5	986.5	994.6	1002.7	1007.6	1013.4	1017.0	1018.7	1019.7
7.5°	994.1	999.1	1012.5	1021.0	1034.9	1046.1	1053.7	1061.8	1063.6	1068.6	1066.7
10°	1028.2	1034.0	1049.3	1065.4	1082.0	1095.9	1103.1	1108.8	1111.1	1112.0	1109.8
12.5°	1067.2	1075.7	1095.4	1115.2	1132.6	1144.7	1146.6	1145.2	1139.0	1133.5	1133.5
15°	1115.2	1122.8	1144.7	1166.2	1183.4	1185.6	1174.3	1167.2	1159.6	1158.2	1158.2
17.5°	1172.6	1176.6	1196.8	1217.8	1219.2	1211.6	1194.9	1188.3	1181.1	1176.2	1176.6
20°	1239.3	1238.0	1252.3	1261.4	1251.9	1228.6	1203.5	1192.3	1185.1	1179.3	1179.8
22.5°	1319.2	1308.9	1307.1	1304.8	1279.7	1230.8	1196.8	1182.4	1171.3	1163.2	1165.8
25°	1435.3	1395.8	1368.5	1353.3	1296.7	1218.7	1175.3	1143.4	1122.4	1108.4	1113.9
27.5°	1580.7	1514.2	1445.1	1407.9	1296.7	1194.1	1123.2	1071.6	1037.2	1022.8	1030.0
30°	1719.1	1649.6	1547.9	1473.8	1293.7	1153.7	1039.4	967.6	927.3	913.0	921.5
32.5°	1837.5	1761.8	1656.8	1546.1	1286.0	1088.2	935.3	856.0	817.0	799.9	808.4
35°	1947.4	1866.7	1766.3	1625.4	1265.9	992.3	821.0	760.4	717.0	689.6	698.6
37.5°	2059.9	1964.0	1869.8	1697.2	1229.5	880.2	733.2	681.5	630.5	593.7	603.5
40°	2182.3	2067.5	1980.6	1739.8	1169.8	773.5	665.0	617.9	563.6	524.6	532.3
42.5°	2325.4	2191.8	2103.9	1761.8	1088.2	697.7	620.5	574.4	523.3	491.5	497.7
45°	2474.8	2328.5	2216.5	1761.4	997.2	662.3	606.2	560.5	504.0	470.8	476.2
47.5°	2631.2	2471.6	2313.7	1732.7	918.3	667.2	598.2	530.4	468.1	435.8	440.3
50°	2788.1	2628.1	2407.9	1678.8	884.7	656.4	568.2	488.3	414.8	385.6	387.4
52.5°	2943.7	2794.5	2489.1	1602.2	850.6	616.5	529.5	433.6	392.8	372.6	372.6
55°	3100.2	2959.0	2577.4	1490.5	765.4	569.9	464.9	413.0	375.4	356.9	355.2
57.5°	3257.1	3149.1	2661.2	1378.8	658.3	512.5	429.6	387.9	357.8	342.1	339.5
60°	3420.4	3366.6	2747.8	1276.1	552.5	439.0	403.5	367.7	337.2	319.7	318.4
62.5°	3588.5	3606.1	2815.5	1143.9	455.1	394.1	380.3	343.5	313.9	297.2	296.8
65°	3758.1	3837.0	2859.9	960.4	369.0	351.6	355.2	317.0	287.0	272.6	272.1
67.5°	3885.8	4003.3	2847.3	726.8	302.7	311.2	323.7	289.3	261.0	249.8	250.2
70°	3900.1	3983.6	2723.5	497.7	253.4	271.7	288.7	261.9	232.7	224.7	225.1
72.5°	3709.2	3714.5	2378.7	325.1	214.3	238.5	252.0	234.1	205.8	197.7	197.3
75°	3208.2	3072.0	1746.5	214.3	179.4	204.9	217.5	204.9	177.5	179.4	173.1
77.5°	2430.8	2175.7	1060.5	152.4	149.8	172.2	189.2	180.3	156.9	176.2	155.2
80°	1252.3	1177.0	473.0	113.9	118.4	137.7	155.6	143.9	124.2	118.4	108.0
82.5°	287.0	333.6	186.5	81.6	85.7	99.1	118.8	108.0	89.3	75.3	74.4
85°	100.4	109.9	82.5	51.1	50.2	61.9	80.7	72.2	60.6	48.4	51.1
87.5°	31.9	41.7	31.0	20.6	21.5	27.8	37.2	34.0	28.3	18.3	19.3
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)