

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: P961540

Luminaire Tested: **NAV-SB2A-827-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

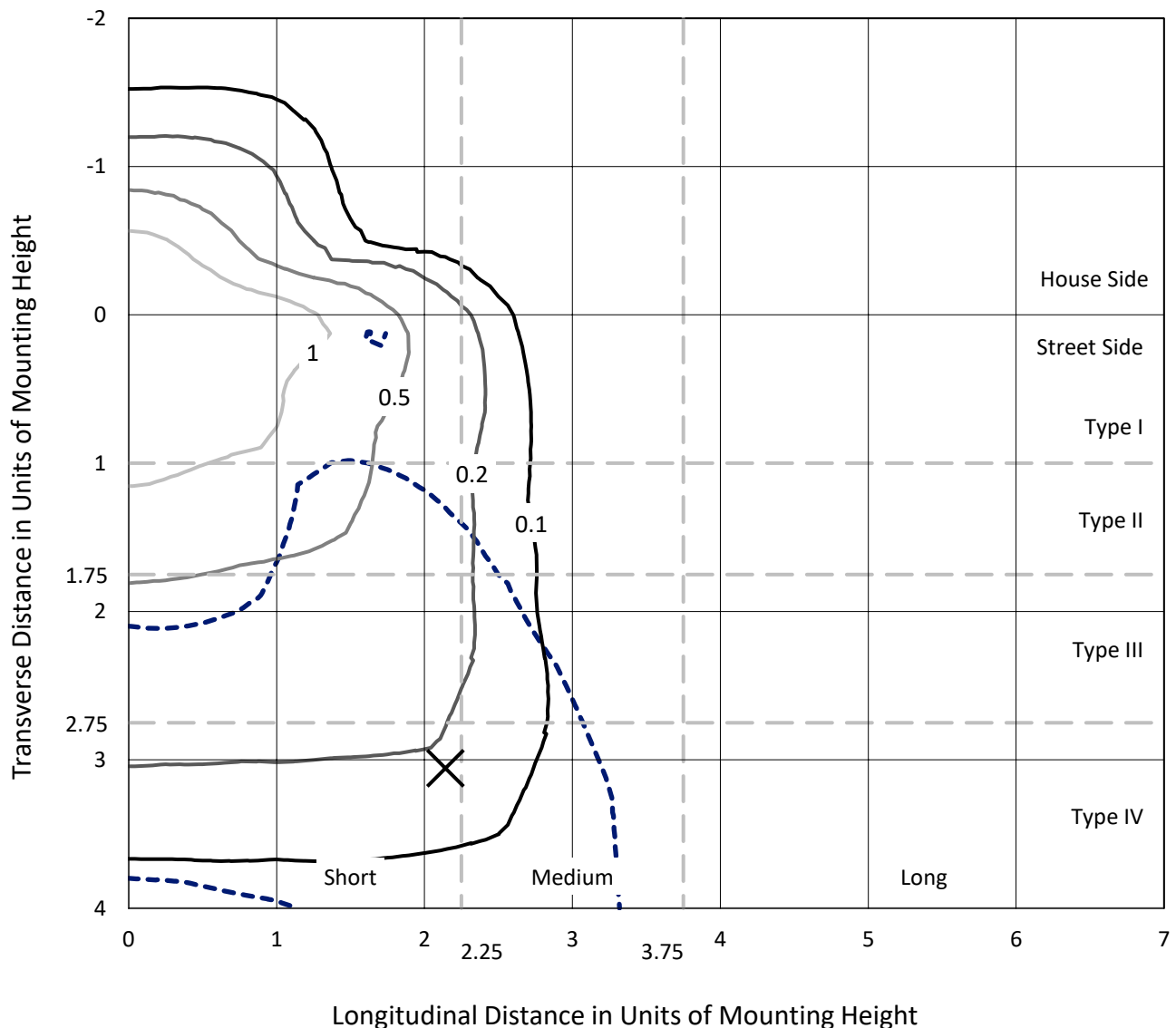
Lumens per Lamp: N/A
Luminaire Lumens: 7902.8 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

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



Iso-Footcandle Lines of Horizontal Illumination

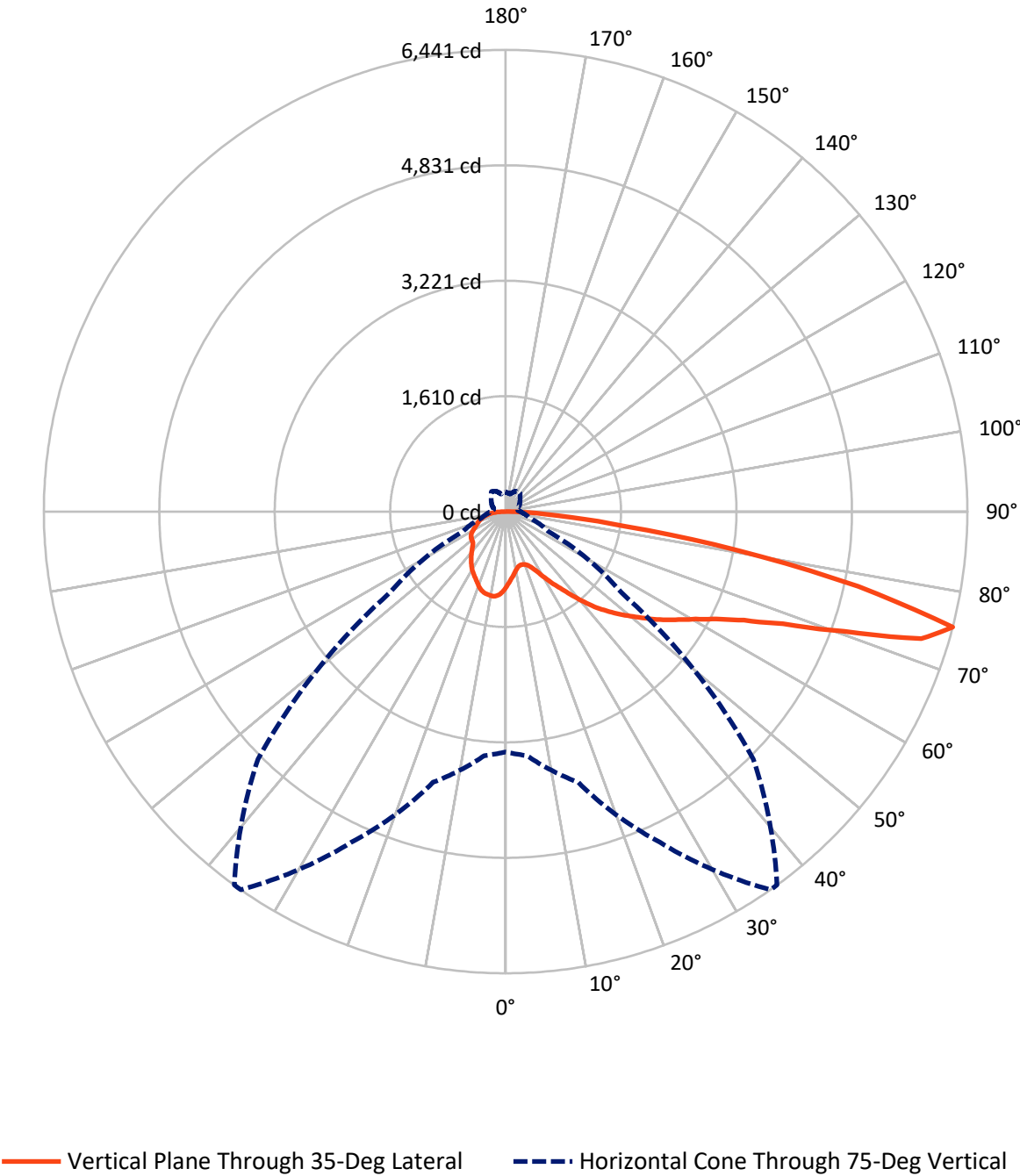
✖ Max cd
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
Type IV - Short - N/A

REPORT NUMBER: P961540
CATALOG NUMBER: NAV-SB2A-827-U-T4FT

Luminous Intensity Polar Plot



REPORT NUMBER: P961540

CATALOG NUMBER: NAV-SB2A-827-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1880.6	0.0	1880.6
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	6022.1	0.0	6022.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	7902.8	0.0	7902.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.7	1.3
10°-20°	287.6	3.6
20°-30°	483.0	6.1
30°-40°	750.6	9.5
40°-50°	1114.1	14.1
50°-60°	1538.0	19.5
60°-70°	1866.0	23.6
70°-80°	1542.1	19.5
80°-90°	221.8	2.8
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°	7902.8	100.0
0°-180°	7902.8	100.0

Coefficient of Utilization



REPORT NUMBER: P961540

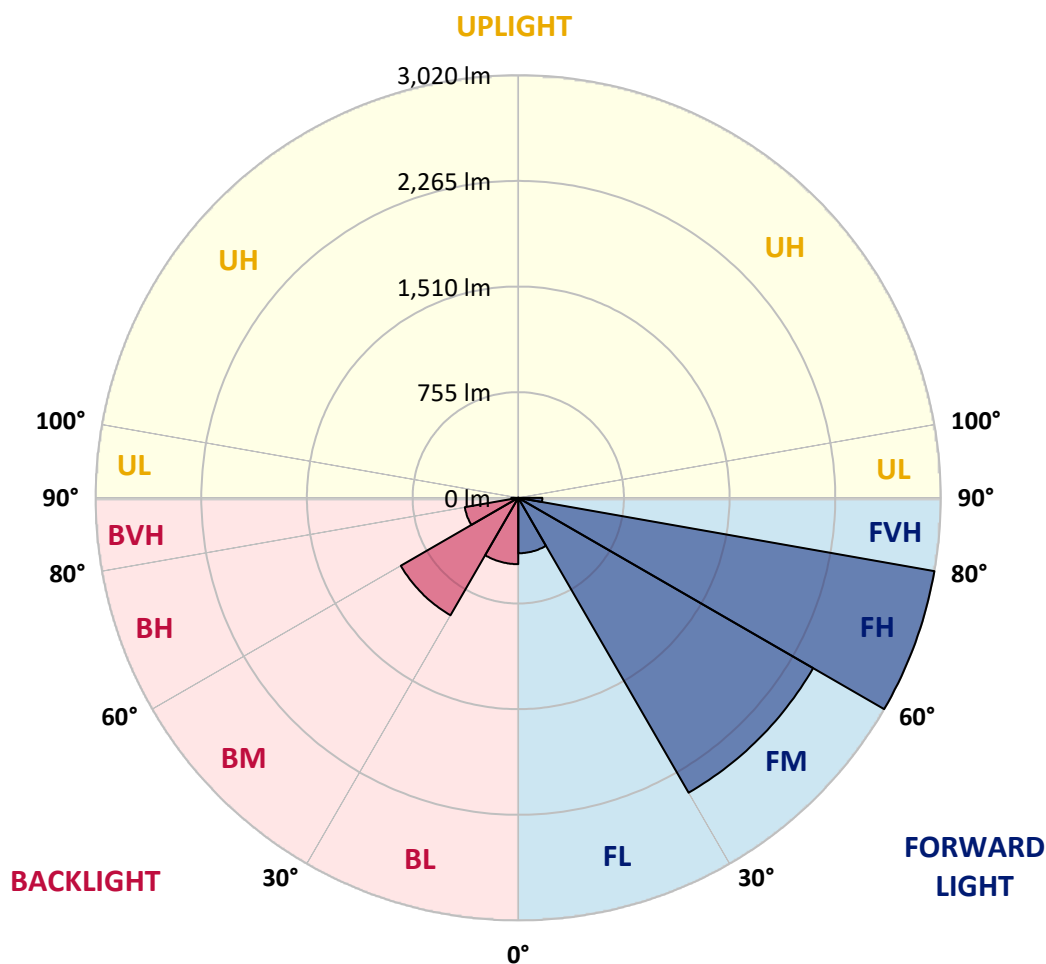
CATALOG NUMBER: NAV-SB2A-827-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	396.3	5.0			
FM	(30°-60°)	2433.6	30.8			
FH	(60°-80°)	3020.3	38.2			G2/5000
FVH	(80°-90°)	171.9	2.2			G2/225
BL	(0°-30°)	473.9	6.0	B1/500		
BM	(30°-60°)	969.0	12.3	B1/1000		
BH	(60°-80°)	387.7	4.9	B1/500		G1/500
BVH	(80°-90°)	49.9	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



REPORT NUMBER: P961540

CATALOG NUMBER: NAV-SB2A-827-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1
2.5°	971.1	977.0	979.6	978.4	984.7	983.9	992.8	1004.0	1019.4	1034.3	1056.1
5°	896.3	902.7	908.3	913.4	925.8	929.7	943.7	965.0	993.3	1021.9	1057.8
7.5°	826.7	832.2	840.8	850.1	871.1	874.9	898.4	931.7	971.1	1012.9	1062.5
10°	769.9	775.4	784.3	795.1	821.1	825.8	855.7	900.2	951.4	1004.4	1067.6
12.5°	745.5	747.2	752.3	763.0	785.7	788.6	821.5	872.4	932.2	997.9	1075.3
15°	744.3	747.6	748.0	753.6	772.4	773.7	804.0	854.4	920.2	996.7	1086.8
17.5°	757.1	759.6	755.7	759.2	775.0	777.2	801.0	845.9	916.4	1002.2	1106.5
20°	791.2	793.3	781.8	777.2	788.6	790.4	813.8	851.5	920.2	1013.8	1133.4
22.5°	863.9	865.1	836.9	817.7	818.6	819.4	839.9	874.1	935.2	1034.7	1167.6
25°	977.0	976.2	931.3	894.2	872.8	868.1	881.8	910.8	960.4	1062.5	1211.6
27.5°	1109.5	1103.1	1058.2	1002.7	956.1	949.3	946.3	958.7	996.3	1099.2	1265.5
30°	1259.0	1253.1	1204.8	1132.1	1067.6	1056.5	1028.3	1021.9	1049.7	1149.2	1340.2
32.5°	1423.1	1419.2	1361.5	1273.6	1187.3	1174.4	1127.0	1109.9	1131.7	1224.9	1444.4
35°	1560.7	1557.2	1509.4	1418.8	1313.2	1297.4	1249.2	1230.0	1241.1	1321.8	1580.8
37.5°	1685.0	1683.3	1642.3	1570.9	1462.0	1442.7	1388.5	1382.0	1380.0	1449.6	1746.1
40°	1800.3	1796.0	1753.3	1715.7	1635.0	1617.4	1569.6	1564.0	1547.9	1606.8	1933.2
42.5°	1928.0	1917.0	1854.9	1837.5	1815.7	1801.1	1772.5	1773.4	1737.5	1784.1	2131.4
45°	2032.3	2025.9	1962.3	1952.0	1975.5	1969.4	1994.2	2000.7	1931.0	1969.9	2337.3
47.5°	2144.2	2138.3	2084.4	2077.2	2140.8	2142.5	2230.1	2232.2	2119.9	2163.1	2543.6
50°	2282.2	2273.7	2220.3	2229.3	2300.6	2307.0	2467.2	2452.6	2293.7	2359.1	2748.3
52.5°	2373.2	2378.3	2366.8	2381.3	2478.8	2484.7	2700.5	2663.3	2465.9	2552.7	2949.1
55°	2440.3	2450.6	2486.4	2519.8	2666.7	2672.7	2920.4	2863.6	2608.6	2732.0	3137.9
57.5°	2526.5	2512.1	2579.1	2644.1	2845.3	2861.1	3134.6	3056.8	2735.0	2886.7	3267.4
60°	2650.4	2640.2	2692.4	2788.4	3045.2	3070.4	3361.0	3230.6	2827.8	3009.3	3292.6
62.5°	2901.7	2876.0	2884.1	2969.2	3297.3	3330.6	3616.4	3382.3	2873.9	3057.2	3157.6
65°	3277.2	3233.2	3192.2	3251.1	3652.3	3685.2	3904.7	3501.5	2856.8	2964.5	2799.2
67.5°	3750.2	3706.5	3656.2	3711.7	4175.2	4201.3	4260.6	3568.5	2722.2	2607.3	2165.6
70°	4140.2	4124.0	4184.2	4412.7	5010.4	5011.3	4716.9	3513.0	2353.5	1848.6	1253.1
72.5°	4088.5	4078.7	4396.1	5102.7	6063.1	6040.4	5148.9	3092.6	1585.4	833.9	469.6
75°	3354.1	3417.8	3909.5	5090.4	6441.2	6438.2	4884.4	1966.1	655.8	345.6	242.6
77.5°	1798.6	1899.4	2538.1	3758.3	5028.3	5104.0	3434.0	687.8	281.6	221.3	167.9
80°	586.6	674.6	1011.7	1913.5	3267.4	3253.2	1471.8	270.0	192.7	156.8	116.2
82.5°	249.1	259.3	452.0	903.5	1676.8	1650.8	468.6	155.1	135.4	107.2	71.8
85°	97.4	109.0	199.5	417.8	726.3	710.4	169.2	76.9	86.7	70.1	42.7
87.5°	32.1	38.8	71.3	143.1	226.0	217.9	41.4	26.4	37.6	32.1	15.4
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: P961540

CATALOG NUMBER: NAV-SB2A-827-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1	1053.1
2.5°	1062.1	1068.9	1077.1	1089.0	1099.2	1107.8	1116.7	1122.3	1124.4	1130.9	1130.5
5°	1069.8	1084.8	1104.7	1124.4	1143.7	1155.2	1165.4	1170.6	1175.3	1178.6	1179.6
7.5°	1082.6	1101.8	1133.4	1159.1	1175.3	1184.7	1191.6	1189.8	1191.6	1192.4	1193.6
10°	1093.7	1120.6	1158.1	1182.5	1194.9	1195.4	1193.6	1187.7	1184.7	1185.1	1185.9
12.5°	1106.9	1136.8	1177.4	1197.9	1201.3	1192.0	1184.7	1174.4	1170.6	1168.9	1168.0
15°	1124.8	1159.1	1198.3	1206.0	1197.5	1185.5	1173.1	1156.5	1147.9	1141.1	1143.3
17.5°	1146.7	1184.3	1214.6	1209.0	1190.6	1171.0	1151.0	1125.8	1108.2	1101.0	1101.4
20°	1177.0	1210.7	1226.9	1202.6	1174.9	1144.9	1110.8	1080.0	1063.7	1056.5	1055.6
22.5°	1213.7	1246.2	1238.9	1191.6	1152.2	1104.3	1061.6	1039.0	1030.8	1025.7	1026.6
25°	1257.8	1285.5	1247.5	1175.3	1115.0	1050.5	1017.6	1010.3	1006.6	1002.7	1002.7
27.5°	1315.0	1329.9	1253.9	1151.4	1057.0	993.3	981.3	982.6	981.3	974.9	976.2
30°	1390.6	1387.6	1259.8	1112.4	990.3	941.6	942.5	948.0	948.8	944.5	946.7
32.5°	1490.1	1459.8	1262.9	1062.1	926.6	896.3	897.2	903.1	907.4	900.2	903.5
35°	1610.6	1544.0	1258.2	998.9	877.5	853.1	846.8	848.5	849.7	842.9	847.6
37.5°	1751.2	1638.4	1237.3	928.8	836.9	810.9	797.1	785.7	778.8	772.4	776.6
40°	1905.4	1741.4	1198.7	860.4	791.6	766.0	745.5	723.8	700.7	692.1	696.0
42.5°	2066.9	1847.3	1152.2	795.1	739.5	718.6	696.8	665.2	630.6	613.1	615.2
45°	2234.4	1955.8	1106.5	730.5	686.1	677.1	651.9	613.9	576.4	554.1	552.4
47.5°	2398.4	2058.3	1039.5	665.6	636.1	646.0	626.3	591.2	549.4	514.3	510.6
50°	2555.2	2154.4	929.7	599.8	595.5	636.5	617.8	567.3	519.5	474.7	470.8
52.5°	2710.7	2232.2	789.0	540.0	573.8	634.0	606.7	551.1	492.6	445.6	440.4
55°	2842.7	2272.4	653.6	488.7	542.1	612.2	593.4	531.9	454.6	404.6	400.3
57.5°	2917.9	2239.9	540.9	438.3	498.6	576.4	570.7	490.9	409.3	370.8	365.7
60°	2885.5	2108.3	448.5	394.3	457.2	537.4	531.5	450.3	374.6	338.4	333.2
62.5°	2706.4	1857.5	375.6	355.9	419.5	497.7	492.2	419.1	348.2	313.1	307.6
65°	2345.8	1511.1	318.7	323.8	381.5	449.9	458.0	393.1	327.3	293.0	287.5
67.5°	1789.2	1094.5	274.3	296.0	344.3	402.8	426.4	374.2	309.8	277.3	272.1
70°	1019.8	621.6	236.7	269.2	311.4	359.3	402.0	359.3	290.9	264.0	260.6
72.5°	386.6	285.4	204.6	242.2	279.8	322.6	375.0	335.8	269.2	249.1	245.7
75°	206.3	173.8	172.2	210.6	243.5	286.7	341.3	312.7	252.9	263.1	271.7
77.5°	140.5	123.0	144.0	180.3	203.8	246.9	305.4	277.7	219.1	218.3	201.2
80°	97.4	87.1	117.1	145.2	157.6	207.7	266.6	238.4	178.6	166.7	159.4
82.5°	58.5	56.8	87.5	108.5	111.5	160.2	220.9	200.0	146.1	127.3	128.1
85°	32.1	33.7	56.0	63.7	65.0	111.9	173.0	154.7	112.3	94.4	95.2
87.5°	9.0	11.6	20.5	25.2	31.2	58.1	102.9	91.8	56.4	39.3	39.3
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)