

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: P960000

Luminaire Tested: **NAV-SB1B-835-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960000
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-835-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5322.8 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

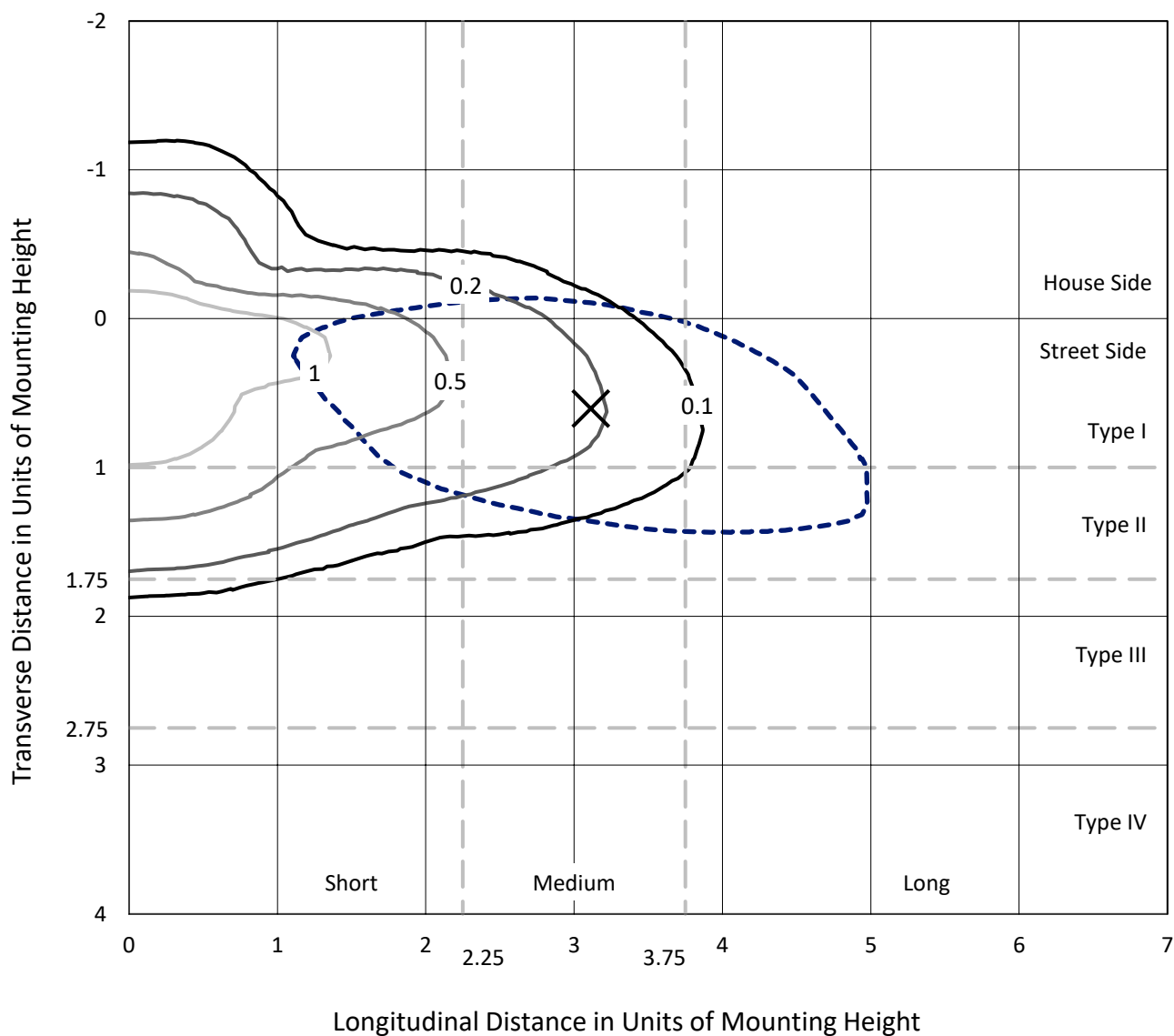
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

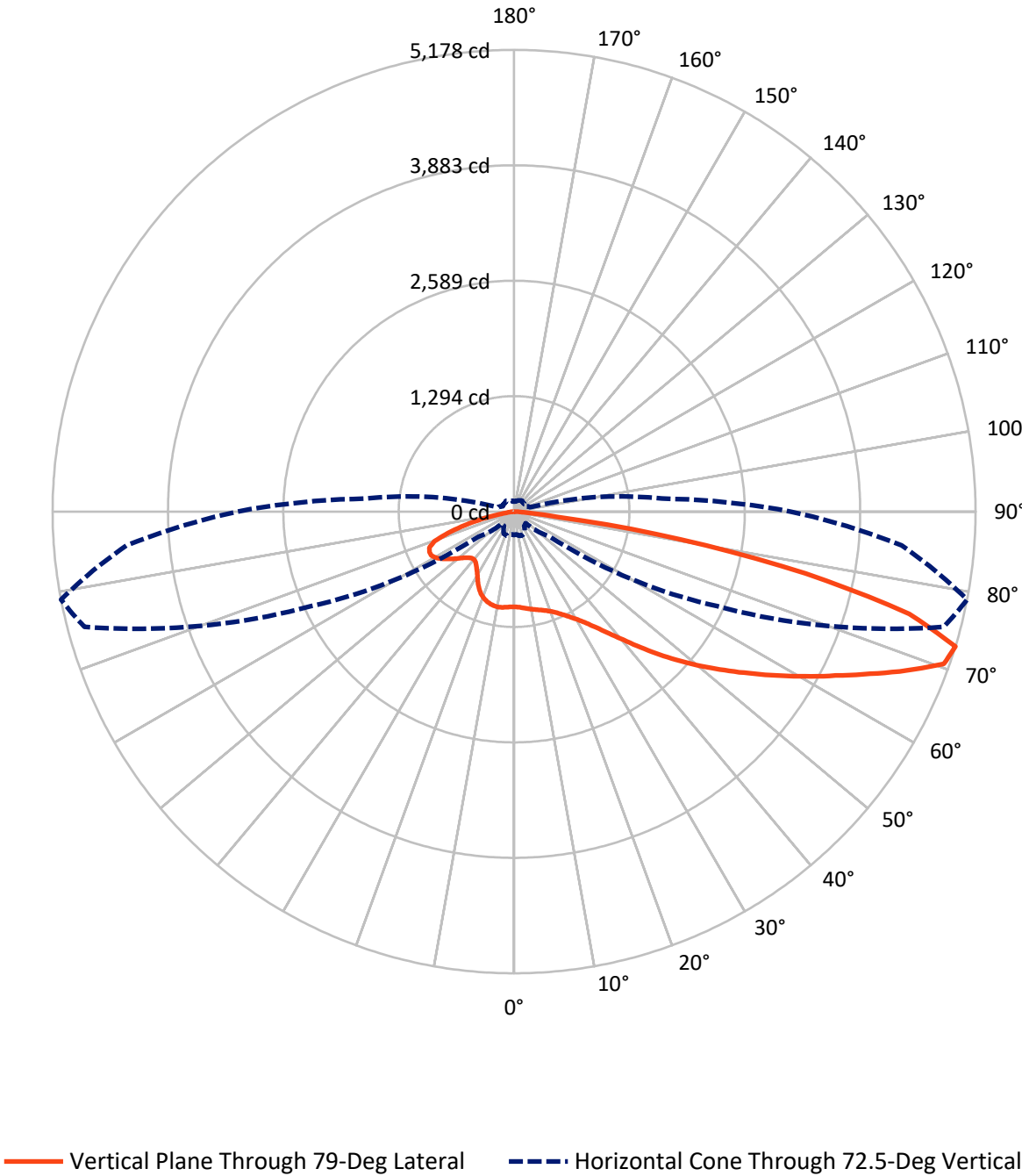
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1171.3	0.0	1171.3
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	4151.5	0.0	4151.5
	% Fixture	78.0	0.0	78.0
Total	Lumens	5322.8	0.0	5322.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	1.8
10°-20°	253.6	4.8
20°-30°	409.2	7.7
30°-40°	614.1	11.5
40°-50°	871.1	16.4
50°-60°	1100.2	20.7
60°-70°	1117.3	21.0
70°-80°	761.5	14.3
80°-90°	98.8	1.9
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°	5322.8	100.0
0°-180°	5322.8	100.0

Coefficient of Utilization



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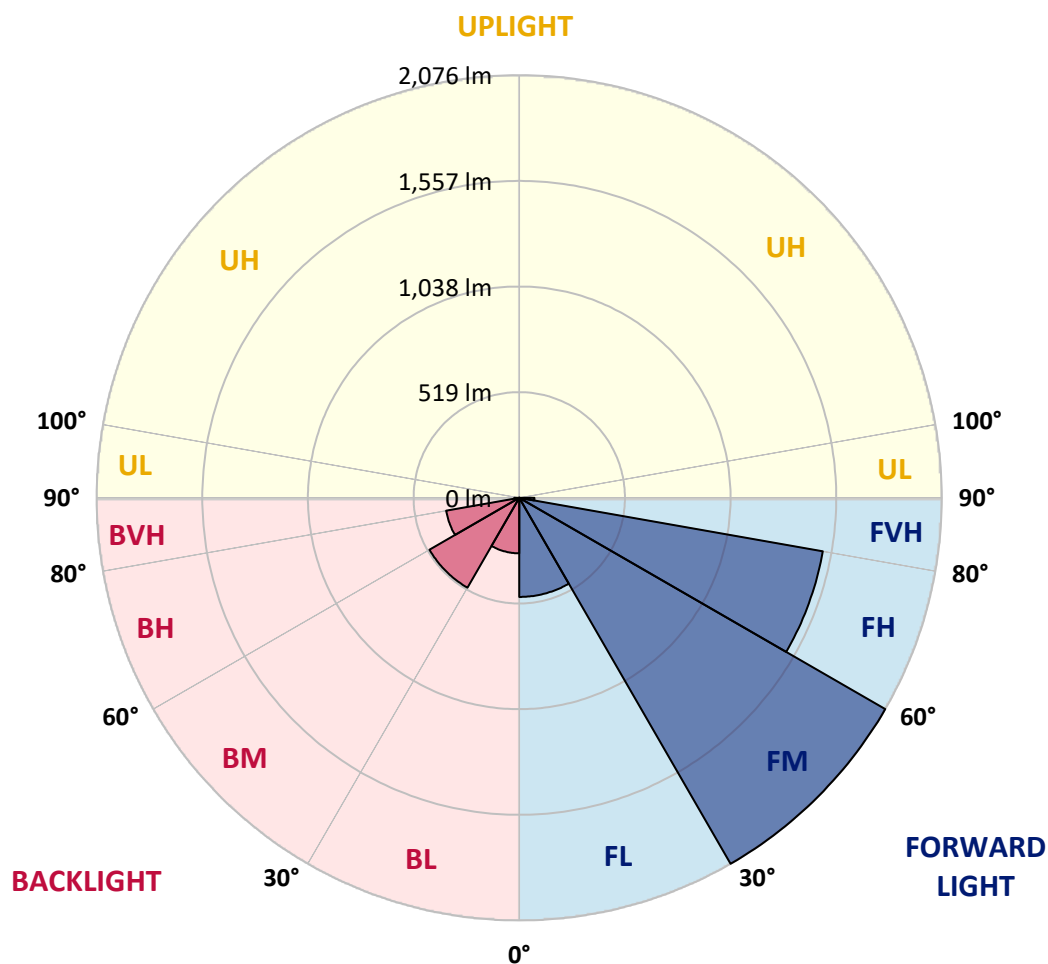
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	486.9	9.1			
FM	(30°-60°)	2076.0	39.0			
FH	(60°-80°)	1514.2	28.4			G1/1800
FVH	(80°-90°)	74.4	1.4			G1/100
BL	(0°-30°)	272.8	5.1	B1/500		
BM	(30°-60°)	509.4	9.6	B1/1000		
BH	(60°-80°)	364.7	6.9	B1/500		G1/500
BVH	(80°-90°)	24.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5
2.5°	1069.1	1064.1	1067.1	1066.0	1067.3	1069.1	1069.6	1070.5	1073.3	1073.0	1072.8
5°	1066.8	1061.8	1066.0	1064.6	1068.3	1072.1	1075.5	1078.6	1083.1	1085.2	1082.3
7.5°	1062.0	1058.6	1062.9	1067.1	1073.9	1079.7	1084.6	1091.6	1098.1	1099.2	1101.2
10°	1034.1	1031.7	1041.5	1052.5	1071.0	1087.1	1097.5	1105.7	1112.7	1113.9	1116.6
12.5°	1005.1	1002.0	1013.0	1028.0	1058.1	1087.1	1109.0	1119.7	1126.0	1129.7	1133.9
15°	1000.4	997.8	1004.0	1017.0	1042.0	1079.5	1116.9	1136.6	1142.0	1146.3	1147.9
17.5°	1023.5	1018.6	1021.2	1025.7	1040.4	1072.5	1123.1	1155.8	1164.0	1168.5	1168.5
20°	1077.0	1070.2	1066.2	1057.3	1054.7	1073.6	1122.6	1178.9	1189.6	1195.3	1196.6
22.5°	1148.2	1143.7	1135.2	1112.4	1087.6	1087.3	1133.2	1208.5	1228.5	1233.8	1230.4
25°	1234.3	1227.5	1216.9	1185.9	1138.4	1114.7	1151.3	1246.2	1279.7	1281.0	1271.2
27.5°	1333.4	1323.3	1308.7	1267.8	1203.7	1157.4	1178.9	1289.6	1338.5	1337.9	1317.6
30°	1437.9	1427.7	1412.2	1362.7	1282.0	1215.2	1217.2	1336.3	1408.4	1405.3	1370.6
32.5°	1514.2	1506.6	1503.5	1465.2	1372.1	1283.3	1261.1	1388.1	1494.6	1491.7	1443.3
35°	1572.8	1562.9	1566.6	1547.1	1470.3	1359.7	1314.9	1449.8	1599.2	1599.0	1538.7
37.5°	1630.8	1622.1	1625.1	1612.2	1561.3	1456.5	1380.5	1525.2	1729.1	1735.2	1654.1
40°	1683.7	1674.4	1686.8	1674.7	1631.9	1559.5	1455.1	1610.5	1879.4	1891.2	1793.7
42.5°	1715.5	1708.2	1728.8	1729.1	1693.3	1646.6	1537.0	1704.6	2053.4	2079.8	1965.5
45°	1726.5	1723.9	1754.9	1761.5	1747.6	1697.0	1610.8	1807.1	2241.0	2288.2	2161.2
47.5°	1714.7	1709.9	1752.6	1776.6	1787.6	1720.6	1671.9	1918.0	2432.3	2501.6	2374.6
50°	1655.0	1645.7	1709.3	1759.7	1798.9	1736.0	1733.6	2046.1	2650.0	2725.8	2589.1
52.5°	1547.7	1540.7	1613.0	1700.6	1774.1	1743.6	1802.8	2186.0	2856.7	2954.7	2809.1
55°	1410.6	1401.3	1481.0	1595.3	1712.5	1741.2	1872.1	2342.5	3100.5	3199.8	3036.3
57.5°	1193.2	1174.6	1275.4	1410.6	1611.9	1738.1	1944.1	2498.2	3348.3	3467.4	3278.8
60°	876.2	848.6	972.2	1132.4	1415.4	1708.0	2033.4	2672.8	3645.6	3752.8	3543.4
62.5°	510.1	494.2	574.9	724.5	1066.8	1530.5	2083.5	2875.8	3937.8	4050.5	3803.6
65°	396.2	391.7	398.7	410.2	593.8	1145.9	1928.9	3073.8	4309.5	4388.3	4074.7
67.5°	362.3	359.0	362.1	340.4	301.2	638.3	1526.0	3123.9	4707.6	4755.5	4312.1
70°	322.1	318.2	328.3	309.8	237.1	290.3	986.0	2942.0	5024.3	5114.2	4492.5
72.5°	262.4	257.9	281.6	273.1	199.7	186.3	495.3	2509.8	4991.1	5177.6	4363.3
75°	201.6	199.1	227.2	234.2	162.8	146.7	237.6	1865.6	4392.3	4580.1	3760.4
77.5°	156.5	154.6	168.9	194.5	131.2	113.8	146.2	1183.4	3309.9	3342.9	2591.4
80°	117.4	111.8	125.0	150.7	102.2	83.0	99.1	690.1	2092.2	1896.6	1127.9
82.5°	73.5	70.6	81.7	100.6	72.1	57.2	64.5	381.2	838.4	493.8	217.6
85°	41.9	40.8	44.5	57.4	39.2	32.9	36.9	168.4	153.1	105.3	65.6
87.5°	16.9	16.3	20.3	25.6	14.3	12.1	12.9	40.6	33.8	31.3	21.7
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°	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5	1068.5
2.5°	1071.6	1071.6	1067.6	1061.5	1054.4	1049.9	1042.6	1040.7	1033.0	1030.7	1034.4
5°	1084.6	1082.3	1070.2	1052.8	1028.8	1006.9	982.7	967.4	946.1	938.4	944.0
7.5°	1100.8	1094.7	1073.9	1035.6	985.4	936.1	884.9	846.0	808.9	795.7	797.3
10°	1115.8	1107.1	1071.6	1004.6	917.9	832.6	750.9	693.7	650.4	632.6	636.6
12.5°	1130.8	1114.7	1056.7	953.0	821.8	706.1	619.1	574.6	547.9	526.5	533.5
15°	1144.8	1122.3	1033.6	884.1	716.6	599.1	534.9	499.5	478.1	464.0	466.6
17.5°	1161.1	1128.7	999.0	796.5	616.3	525.1	472.7	451.3	447.1	445.5	446.6
20°	1184.0	1134.7	953.4	698.5	542.5	466.0	438.9	437.0	436.6	435.8	438.7
22.5°	1208.5	1141.7	893.1	609.6	479.8	429.1	424.4	420.4	417.8	417.6	420.7
25°	1237.5	1144.0	817.6	536.7	426.3	411.6	406.0	400.1	398.4	398.4	400.1
27.5°	1265.6	1136.3	729.8	473.3	396.2	395.5	388.3	386.3	386.0	386.8	389.1
30°	1293.8	1122.0	642.5	414.7	378.7	378.7	376.2	377.6	378.7	381.5	383.5
32.5°	1331.8	1106.8	569.6	371.4	363.5	360.7	363.2	366.0	367.2	370.8	373.9
35°	1387.5	1096.1	511.6	347.7	347.7	344.1	345.4	344.9	342.3	340.7	344.6
37.5°	1461.2	1095.5	463.7	336.7	334.5	333.9	334.3	330.6	320.7	308.8	309.1
40°	1550.0	1110.7	426.8	329.1	327.5	330.9	329.1	319.3	292.2	271.7	271.1
42.5°	1669.1	1154.1	403.2	319.8	324.9	329.1	322.4	288.3	270.0	256.2	255.6
45°	1809.3	1224.5	391.0	310.0	320.1	325.2	292.5	277.6	263.0	246.4	245.3
47.5°	1968.1	1313.2	388.3	300.7	309.4	312.5	279.8	273.1	256.5	238.5	237.1
50°	2140.9	1418.2	395.9	289.8	294.0	283.2	275.6	269.5	252.3	234.5	232.6
52.5°	2319.8	1533.9	411.0	274.8	278.5	266.6	274.0	268.7	249.7	225.8	224.2
55°	2495.5	1650.5	425.7	257.4	262.7	251.7	269.2	265.3	238.2	211.2	209.7
57.5°	2673.9	1766.5	440.0	241.9	247.5	237.4	261.6	256.2	225.3	197.6	197.1
60°	2859.4	1879.1	446.8	226.9	230.8	224.2	250.0	240.8	210.6	183.9	183.0
62.5°	3033.2	1972.8	435.8	212.0	214.5	211.8	234.8	222.4	196.0	168.4	168.1
65°	3207.5	2028.6	402.1	197.4	197.9	196.5	213.4	202.7	178.8	154.9	153.1
67.5°	3365.5	2059.8	348.3	181.6	180.2	179.7	193.4	181.3	162.2	141.3	139.6
70°	3398.9	1980.5	266.1	163.0	163.0	161.6	171.5	159.1	143.9	127.0	126.4
72.5°	3104.4	1665.9	188.9	141.9	144.1	141.3	149.5	139.1	125.3	114.0	110.7
75°	2503.4	1221.7	137.4	120.2	124.1	119.4	127.0	119.6	107.8	107.5	96.9
77.5°	1720.1	755.4	99.6	99.1	101.9	95.7	104.4	100.6	89.8	85.1	79.6
80°	734.0	301.2	72.7	76.6	76.6	70.9	81.1	82.2	72.9	70.6	70.6
82.5°	146.2	85.6	50.9	52.7	49.5	47.9	57.4	63.7	87.8	97.7	98.0
85°	44.0	31.6	30.6	28.7	25.3	25.6	33.8	64.0	78.8	45.1	38.8
87.5°	12.1	7.9	8.2	6.5	5.3	7.1	11.6	48.4	26.4	11.3	9.5
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)