

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: P882387

Luminaire Tested: **NAV-SB2B-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882387
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10305 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

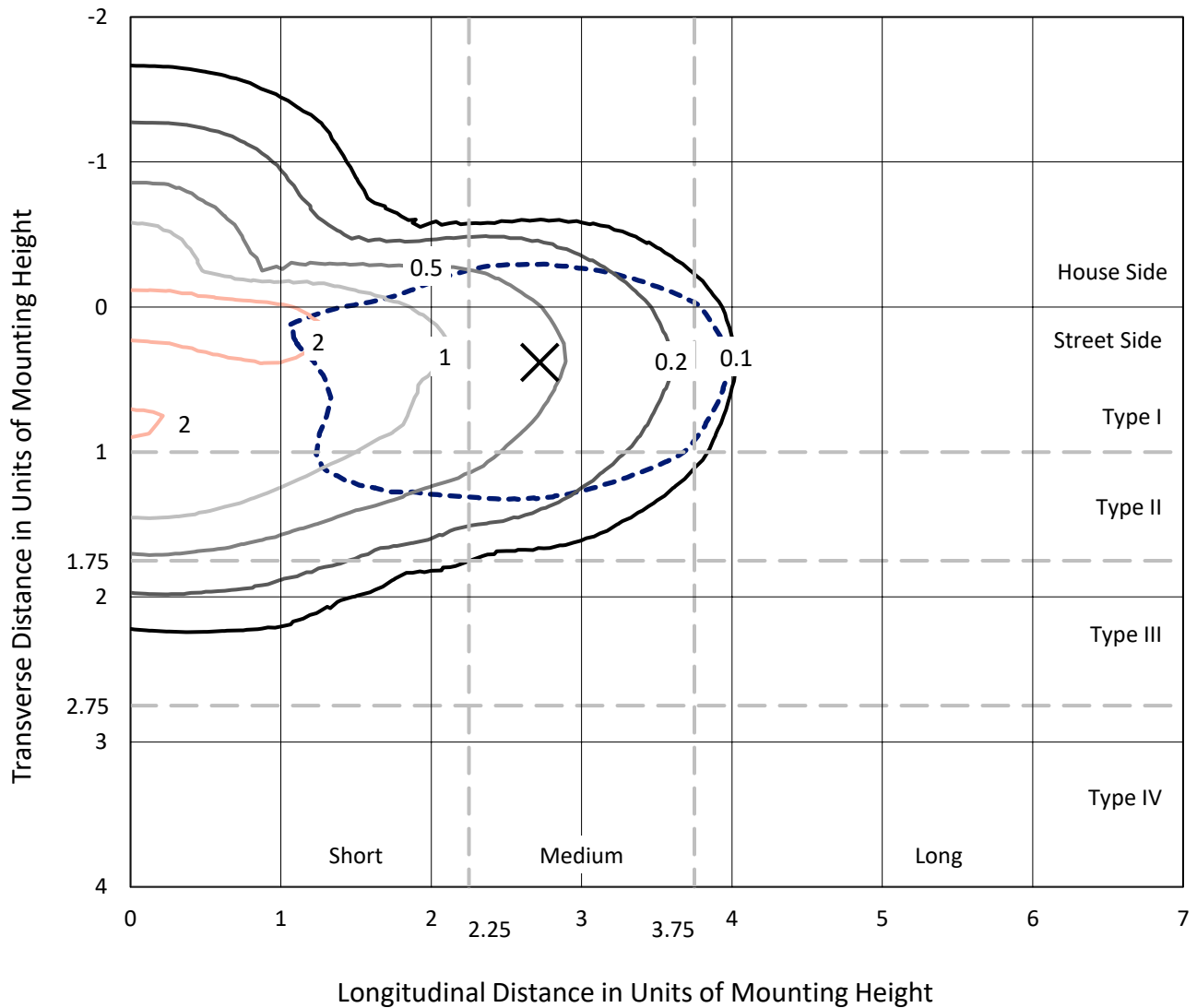
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

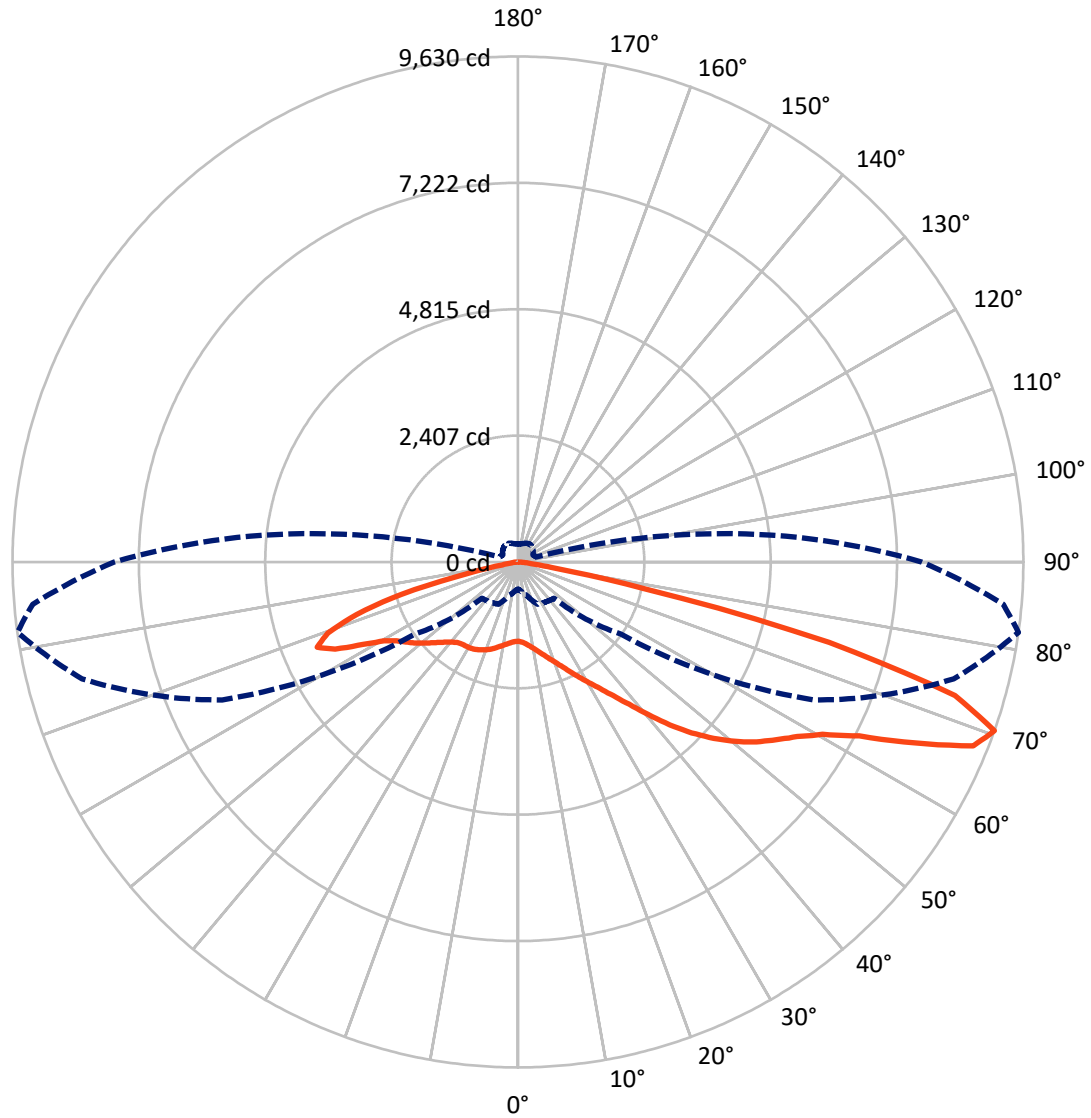
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2540.4	0.0	2540.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	7764.6	0.0	7764.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	10305.0	0.0	10305.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	1.4
10°-20°	409.8	4.0
20°-30°	685.6	6.7
30°-40°	1071.1	10.4
40°-50°	1705.9	16.6
50°-60°	2374.0	23.0
60°-70°	2483.3	24.1
70°-80°	1297.9	12.6
80°-90°	134.8	1.3
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°	10305.0	100.0
0°-180°	10305.0	100.0

Coefficient of Utilization

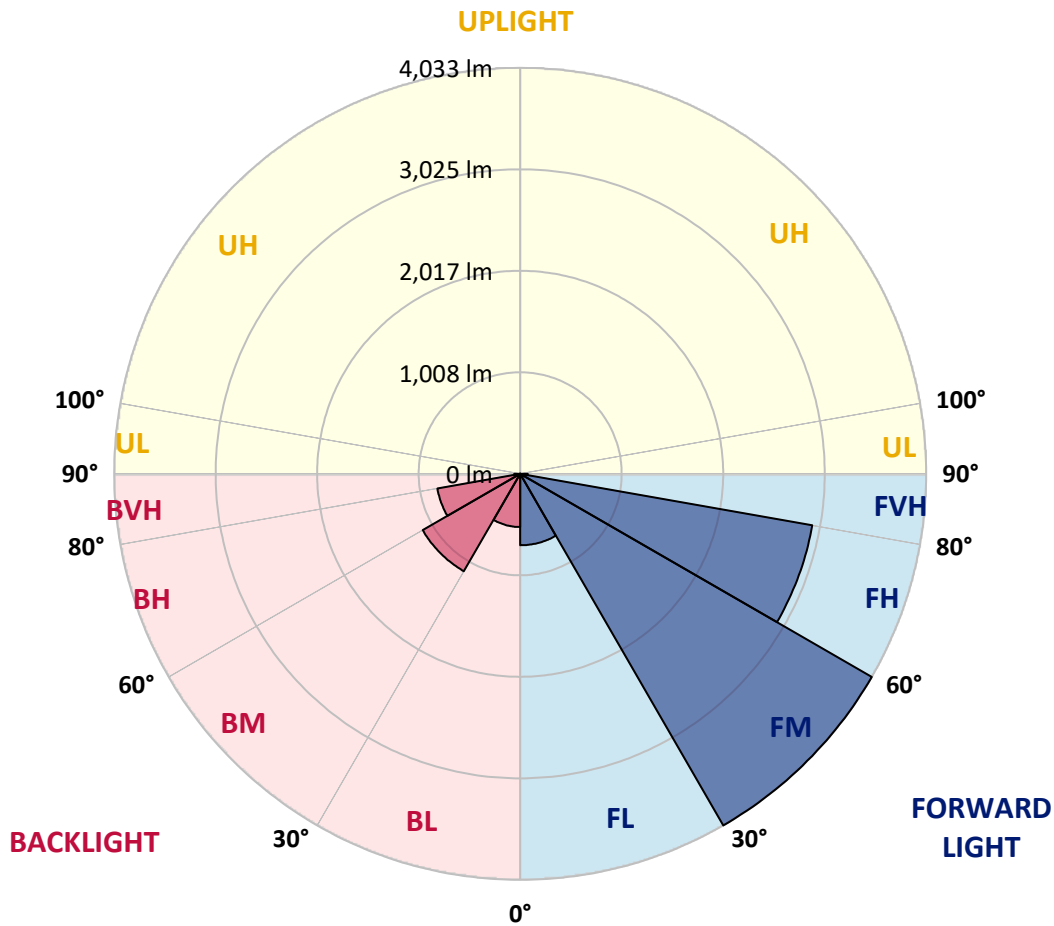


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	709.6	6.9			
FM (30°-60°)	4033.3	39.1			
FH (60°-80°)	2946.2	28.6			G2/5000
FVH (80°-90°)	75.4	0.7			G1/100
BL (0°-30°)	528.5	5.1	B2/1000		
BM (30°-60°)	1117.7	10.8	B2/2500		
BH (60°-80°)	834.9	8.1	B2/1000		G2/1000
BVH (80°-90°)	59.3	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8
2.5°	1546.9	1555.7	1552.9	1550.2	1550.2	1546.4	1545.8	1540.4	1536.0	1528.9	1527.2
5°	1566.6	1575.9	1574.8	1577.0	1584.1	1585.8	1587.4	1584.1	1575.4	1566.6	1562.8
7.5°	1549.1	1559.5	1562.8	1575.9	1597.8	1617.5	1632.2	1638.2	1630.0	1617.5	1611.5
10°	1490.1	1501.5	1513.0	1544.2	1583.0	1629.5	1668.9	1692.4	1690.7	1678.7	1668.3
12.5°	1370.3	1382.3	1406.9	1467.6	1538.7	1620.8	1694.0	1743.2	1760.2	1751.4	1733.4
15°	1274.6	1285.0	1303.6	1365.9	1458.3	1583.0	1703.3	1799.0	1842.2	1837.3	1815.4
17.5°	1271.9	1276.3	1287.7	1317.3	1388.4	1524.0	1693.5	1853.7	1936.3	1935.7	1908.4
20°	1320.0	1321.6	1328.2	1334.2	1374.7	1479.1	1668.3	1899.1	2041.8	2041.8	2012.3
22.5°	1386.7	1385.6	1392.2	1386.7	1406.4	1475.3	1652.5	1939.0	2159.4	2168.1	2130.9
25°	1486.8	1481.3	1479.7	1467.1	1470.9	1510.8	1670.0	1984.4	2298.8	2316.8	2270.4
27.5°	1620.2	1611.5	1605.4	1576.5	1566.6	1584.1	1723.6	2039.1	2454.1	2485.3	2426.2
30°	1794.1	1778.2	1769.5	1719.2	1683.6	1686.4	1804.5	2111.8	2616.5	2666.8	2591.9
32.5°	2031.4	2006.8	1983.3	1900.7	1835.6	1814.3	1908.9	2212.4	2792.6	2873.0	2776.7
35°	2297.2	2277.5	2252.3	2124.9	2024.8	1975.6	2050.0	2352.9	2998.7	3126.1	3000.9
37.5°	2553.1	2536.1	2548.1	2376.4	2247.4	2175.8	2234.8	2541.6	3253.0	3441.1	3282.0
40°	2817.7	2804.6	2806.2	2642.2	2491.8	2411.4	2459.0	2778.4	3544.4	3815.7	3619.9
42.5°	3105.3	3095.5	3062.7	2917.2	2748.3	2673.4	2717.1	3051.8	3857.2	4242.2	3990.6
45°	3427.4	3421.4	3390.8	3224.0	3030.4	2946.2	3005.3	3353.6	4171.6	4643.5	4363.0
47.5°	3705.7	3710.7	3706.8	3566.3	3365.6	3242.0	3312.6	3668.6	4464.2	5020.8	4720.1
50°	3839.7	3865.4	3903.1	3859.4	3734.7	3609.0	3622.6	3972.6	4743.0	5374.6	5062.4
52.5°	3769.7	3818.4	3921.2	3991.2	4039.3	4013.1	3976.4	4274.4	5005.5	5694.0	5386.1
55°	3508.9	3577.2	3747.9	3916.8	4162.3	4353.2	4401.3	4609.1	5261.4	5975.0	5692.3
57.5°	3033.7	3144.7	3297.8	3639.6	4053.0	4517.8	4896.7	5073.3	5532.6	6275.2	6012.7
60°	2219.0	2367.7	2558.0	3066.5	3670.2	4429.7	5318.3	5786.4	5918.1	6664.0	6430.0
62.5°	1420.1	1511.9	1686.9	2165.9	2859.8	3978.6	5447.3	6677.7	6571.6	7301.6	7055.5
65°	972.2	1031.3	1191.5	1460.5	1848.8	2961.5	5101.8	7345.9	7609.4	8312.1	8125.1
67.5°	706.5	751.3	888.0	1123.7	1204.6	1752.5	3958.9	7315.3	8618.3	9353.2	9062.3
70°	515.1	546.8	661.6	888.0	926.8	975.0	2398.3	6218.3	8596.4	9629.9	9281.6
72.5°	381.7	403.5	480.6	689.0	750.2	658.4	1187.1	4519.4	7386.9	8710.2	8430.7
75°	276.1	292.5	349.4	527.1	600.4	501.4	592.2	2641.1	5152.6	6127.0	6176.2
77.5°	211.1	223.6	260.8	386.0	480.6	376.2	367.5	1215.0	2443.2	2455.2	2593.0
80°	169.5	177.7	197.9	271.8	368.6	281.6	239.5	490.5	772.1	653.4	685.7
82.5°	124.7	138.3	167.3	190.8	263.6	194.1	146.0	247.7	293.6	252.6	254.8
85°	71.1	80.4	101.2	136.7	168.4	118.7	83.7	109.9	136.7	112.1	100.1
87.5°	25.2	32.8	35.5	53.6	73.3	49.2	32.3	31.7	44.8	33.4	27.9
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°	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8	1510.8
2.5°	1521.8	1519.0	1508.1	1493.3	1478.0	1463.3	1458.3	1448.0	1440.8	1437.0	1441.4
5°	1552.4	1543.7	1518.0	1485.1	1450.7	1413.5	1387.3	1363.2	1345.7	1329.3	1335.9
7.5°	1596.1	1580.8	1536.5	1479.1	1417.9	1356.1	1310.2	1275.2	1251.7	1236.3	1239.6
10°	1647.0	1623.5	1555.7	1469.8	1375.2	1286.6	1232.5	1202.4	1187.7	1179.5	1181.7
12.5°	1705.5	1672.2	1575.4	1448.5	1310.2	1209.0	1171.8	1163.1	1163.6	1164.2	1165.3
15°	1777.7	1731.2	1591.2	1402.0	1225.4	1149.4	1142.8	1157.1	1171.8	1178.9	1178.4
17.5°	1859.2	1793.5	1594.0	1325.5	1142.3	1111.1	1131.9	1162.5	1184.9	1194.8	1197.0
20°	1946.7	1857.0	1574.3	1217.2	1073.9	1080.0	1117.1	1156.5	1181.1	1193.7	1197.0
22.5°	2046.7	1924.8	1527.2	1103.5	1018.2	1046.1	1089.8	1128.1	1153.8	1166.4	1169.6
25°	2161.0	2000.8	1453.4	1007.8	970.0	1007.8	1051.5	1083.2	1104.0	1115.5	1118.8
27.5°	2287.9	2080.1	1355.0	931.8	927.9	968.4	1004.5	1029.1	1040.0	1048.8	1052.1
30°	2415.3	2152.3	1235.8	874.4	891.3	929.6	955.3	966.2	969.5	971.1	975.0
32.5°	2553.1	2214.6	1110.6	826.8	856.3	891.9	907.2	912.1	896.8	886.4	889.7
35°	2719.8	2281.3	988.1	789.0	821.9	852.5	857.4	853.0	835.0	813.7	814.8
37.5°	2926.0	2364.4	890.2	762.3	789.6	809.8	803.8	802.7	804.4	779.2	780.8
40°	3178.6	2472.7	818.6	741.5	763.3	767.7	750.8	760.1	768.3	730.0	731.1
42.5°	3459.1	2603.4	773.2	727.3	741.5	731.1	704.8	715.2	714.1	663.8	663.3
45°	3745.1	2745.5	757.3	716.9	721.2	700.5	671.5	674.2	651.3	605.9	607.5
47.5°	4029.5	2898.1	767.2	708.1	696.1	672.6	650.2	638.1	604.2	570.3	570.3
50°	4308.3	3058.3	803.3	690.6	661.6	648.0	631.6	610.2	574.2	545.2	543.0
52.5°	4567.0	3219.6	843.7	661.6	618.4	626.6	616.3	591.7	556.1	526.6	527.1
55°	4811.9	3380.9	859.6	621.7	578.0	608.1	602.0	556.7	514.0	489.9	487.8
57.5°	5078.8	3575.1	842.1	570.9	545.2	586.7	563.8	513.5	488.9	470.8	469.2
60°	5448.4	3879.6	804.4	508.0	514.0	555.0	515.6	494.9	468.1	447.8	446.7
62.5°	6062.5	4447.8	743.7	445.7	477.4	508.0	492.7	471.9	444.6	424.9	424.9
65°	6970.2	5237.4	629.4	397.0	436.4	462.1	468.1	447.3	418.9	398.1	399.2
67.5°	7735.8	5732.8	476.3	356.5	394.3	424.9	441.8	421.6	391.5	371.3	371.8
70°	7693.6	5373.0	363.6	316.6	357.1	388.2	410.1	394.3	362.0	342.9	344.5
72.5°	6833.5	4494.8	294.2	276.1	319.3	350.0	376.2	364.2	331.4	312.8	312.8
75°	5020.3	3190.6	235.1	235.1	272.3	310.0	339.0	331.4	301.3	288.2	284.3
77.5°	2116.2	1338.6	184.3	195.2	226.4	266.3	302.4	305.1	278.9	295.3	267.9
80°	562.7	369.1	140.5	153.7	177.7	219.8	263.0	261.9	233.5	218.2	202.9
82.5°	214.4	145.5	100.1	108.3	128.5	168.4	208.3	214.9	186.5	161.3	161.3
85°	82.6	62.3	61.8	65.1	74.9	111.5	157.5	163.0	140.5	119.2	123.0
87.5°	21.3	18.6	23.0	21.9	34.4	59.6	90.2	93.5	85.8	49.8	71.1
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)