

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: P882617

Luminaire Tested: **NAV-SB2C-827-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882617
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-SB2C-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12288 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

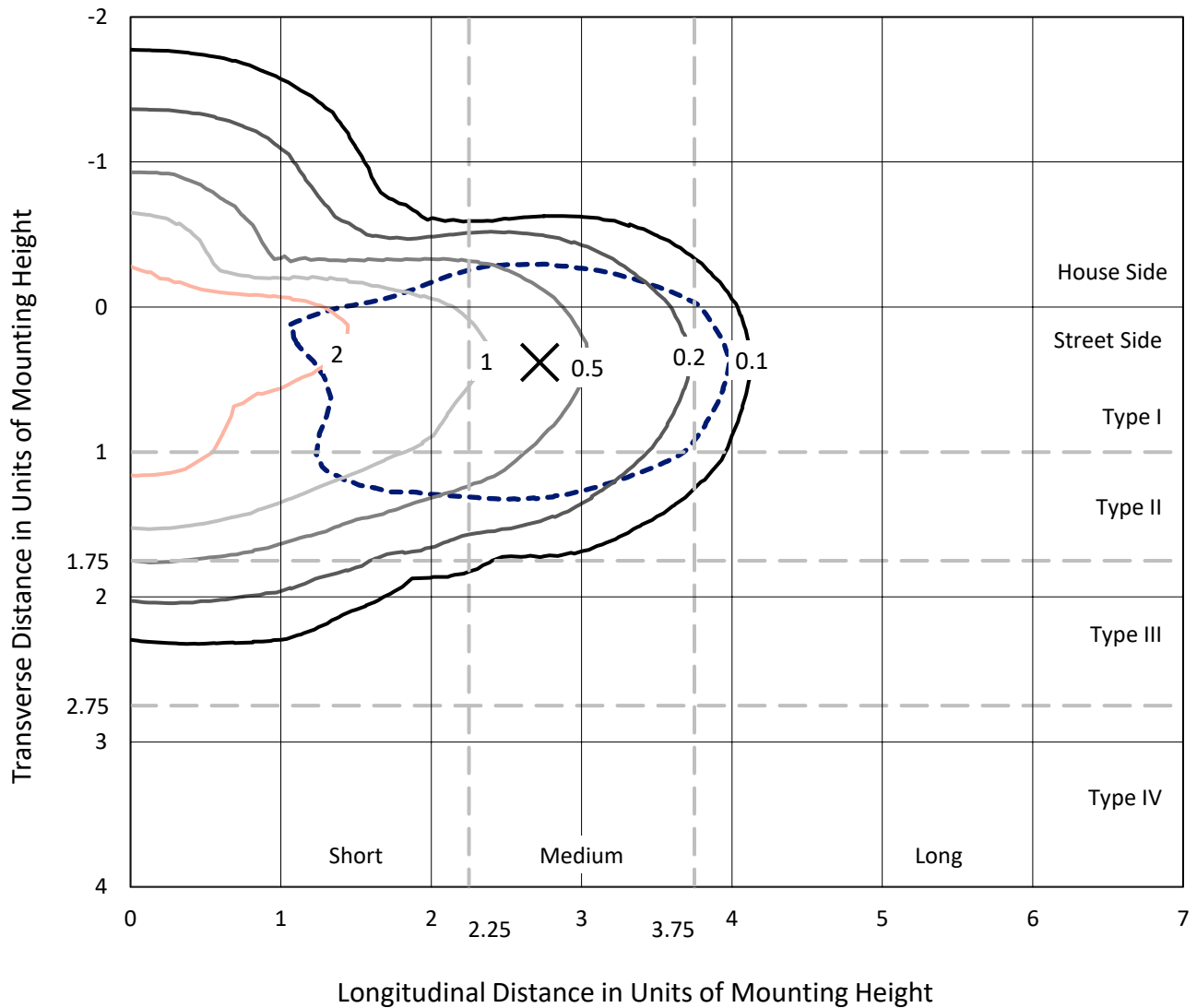
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

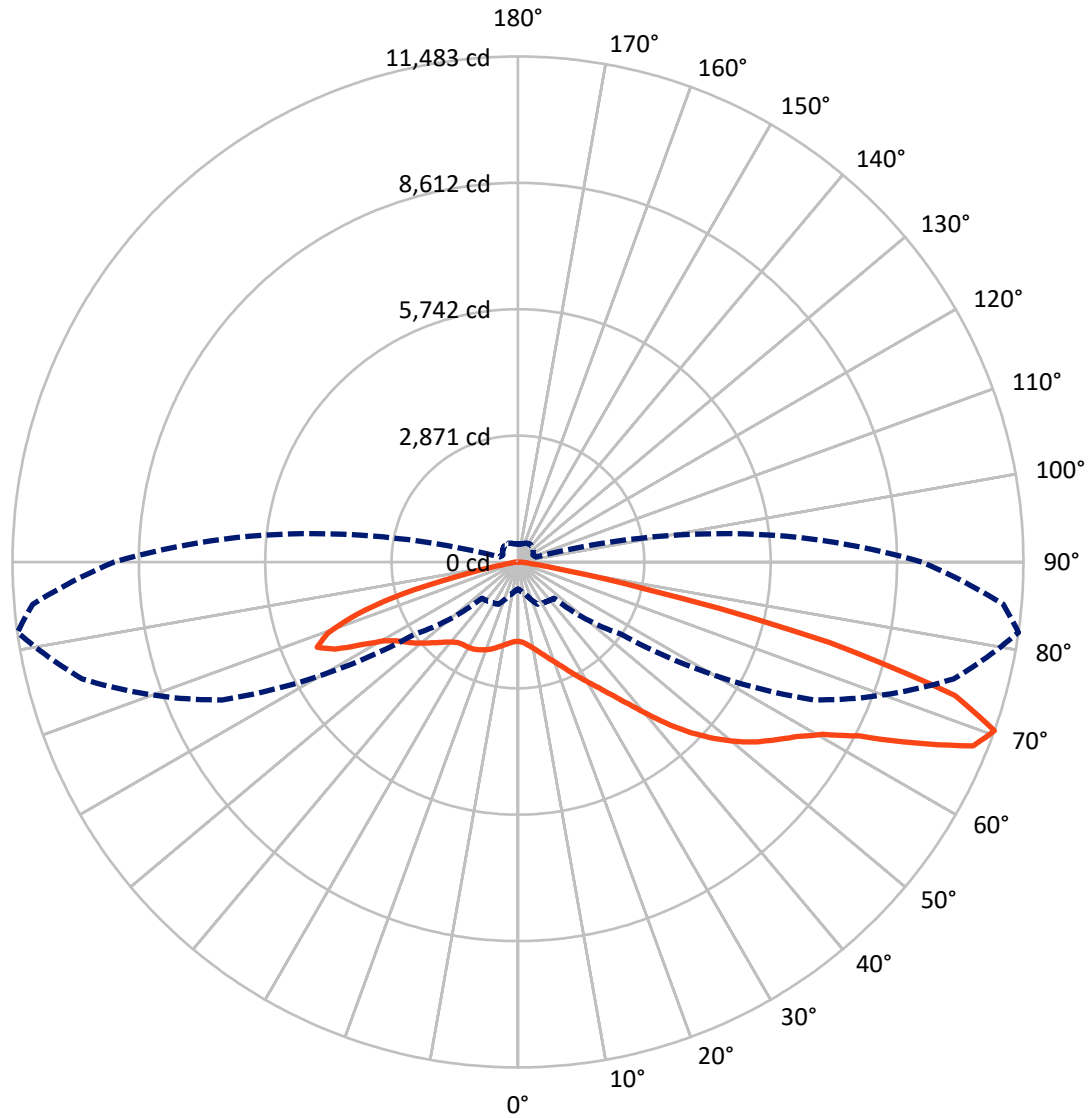
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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	3029.3	0.0	3029.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	9258.7	0.0	9258.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	12288.0	0.0	12288.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.1	1.4
10°-20°	488.7	4.0
20°-30°	817.6	6.7
30°-40°	1277.2	10.4
40°-50°	2034.2	16.6
50°-60°	2830.8	23.0
60°-70°	2961.1	24.1
70°-80°	1547.6	12.6
80°-90°	160.7	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°	12288.0	100.0
0°-180°	12288.0	100.0

Coefficient of Utilization

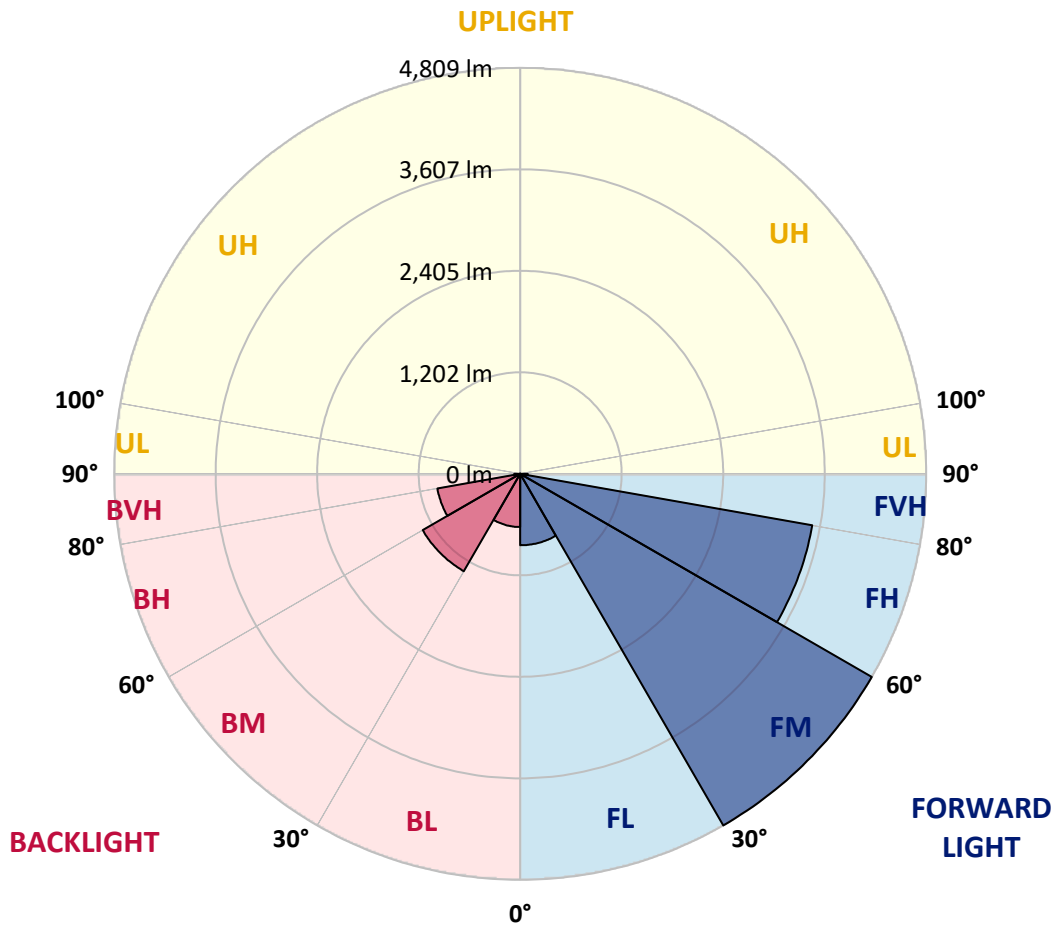


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	846.2	6.9			
FM (30°-60°)	4809.4	39.1			
FH (60°-80°)	3513.2	28.6			G2/5000
FVH (80°-90°)	90.0	0.7			G1/100
BL (0°-30°)	630.2	5.1	B2/1000		
BM (30°-60°)	1332.8	10.8	B2/2500		
BH (60°-80°)	995.6	8.1	B2/1000		G2/1000
BVH (80°-90°)	70.7	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°	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6
2.5°	1844.6	1855.0	1851.8	1848.5	1848.5	1844.0	1843.3	1836.8	1831.6	1823.1	1821.1
5°	1868.1	1879.2	1877.9	1880.5	1888.9	1890.9	1892.9	1888.9	1878.5	1868.1	1863.5
7.5°	1847.2	1859.6	1863.5	1879.2	1905.2	1928.7	1946.3	1953.5	1943.7	1928.7	1921.5
10°	1776.8	1790.5	1804.2	1841.3	1887.6	1943.1	1990.0	2018.1	2016.1	2001.7	1989.4
12.5°	1634.0	1648.3	1677.7	1750.1	1834.8	1932.6	2020.0	2078.7	2098.9	2088.5	2067.0
15°	1519.9	1532.3	1554.5	1628.8	1739.0	1887.6	2031.1	2145.2	2196.7	2190.8	2164.8
17.5°	1516.6	1521.9	1535.5	1570.8	1655.5	1817.2	2019.4	2210.4	2308.9	2308.2	2275.6
20°	1574.0	1576.0	1583.8	1591.0	1639.2	1763.8	1989.4	2264.5	2434.7	2434.7	2399.5
22.5°	1653.6	1652.3	1660.1	1653.6	1677.0	1759.2	1970.5	2312.1	2574.9	2585.3	2541.0
25°	1772.9	1766.4	1764.4	1749.4	1754.0	1801.6	1991.3	2366.2	2741.2	2762.7	2707.3
27.5°	1932.0	1921.5	1914.4	1879.8	1868.1	1888.9	2055.2	2431.4	2926.3	2963.5	2893.1
30°	2139.3	2120.4	2110.0	2050.0	2007.6	2010.9	2151.7	2518.2	3120.0	3180.0	3090.6
32.5°	2422.3	2393.0	2364.9	2266.5	2188.9	2163.5	2276.3	2638.1	3329.9	3425.8	3311.0
35°	2739.2	2715.7	2685.7	2533.8	2414.5	2355.8	2444.5	2805.7	3575.8	3727.7	3578.4
37.5°	3044.4	3024.1	3038.5	2833.7	2679.9	2594.4	2664.9	3030.7	3879.0	4103.3	3913.5
40°	3359.9	3344.3	3346.2	3150.6	2971.3	2875.5	2932.2	3313.0	4226.5	4549.9	4316.5
42.5°	3702.9	3691.2	3652.1	3478.6	3277.1	3187.8	3240.0	3639.0	4599.5	5058.5	4758.6
45°	4087.0	4079.8	4043.3	3844.4	3613.6	3513.2	3583.6	3998.9	4974.4	5537.1	5202.6
47.5°	4418.8	4424.7	4420.1	4252.6	4013.3	3865.9	3950.0	4374.5	5323.2	5987.0	5628.4
50°	4578.6	4609.2	4654.2	4602.1	4453.4	4303.4	4319.7	4737.0	5655.8	6408.9	6036.5
52.5°	4495.1	4553.2	4675.7	4759.2	4816.6	4785.3	4741.6	5097.0	5968.7	6789.6	6422.6
55°	4184.1	4265.6	4469.1	4670.5	4963.3	5190.9	5248.2	5496.0	6273.9	7124.8	6787.7
57.5°	3617.5	3749.9	3932.4	4339.9	4832.9	5387.1	5839.0	6049.6	6597.3	7482.8	7169.8
60°	2646.0	2823.3	3050.2	3656.6	4376.5	5282.1	6341.7	6899.8	7057.0	7946.4	7667.3
62.5°	1693.3	1802.9	2011.5	2582.7	3410.1	4744.2	6495.6	7962.7	7836.2	8706.6	8413.2
65°	1159.3	1229.7	1420.8	1741.6	2204.5	3531.4	6083.5	8759.4	9073.7	9911.6	9688.6
67.5°	842.4	895.9	1058.9	1339.9	1436.4	2089.8	4720.7	8722.9	10276.7	11153.1	10806.2
70°	614.2	652.0	789.0	1058.9	1105.2	1162.6	2859.8	7414.9	10250.7	11483.0	11067.7
72.5°	455.1	481.2	573.1	821.6	894.6	785.1	1415.6	5389.1	8808.3	10386.3	10053.1
75°	329.3	348.8	416.7	628.6	715.9	597.9	706.2	3149.3	6144.1	7306.1	7364.7
77.5°	251.7	266.7	311.0	460.3	573.1	448.6	438.2	1448.8	2913.3	2927.6	3092.0
80°	202.1	211.9	236.0	324.1	439.5	335.8	285.6	584.9	920.7	779.2	817.7
82.5°	148.7	165.0	199.5	227.6	314.3	231.5	174.1	295.4	350.1	301.2	303.8
85°	84.8	95.8	120.6	163.0	200.8	141.5	99.8	131.1	163.0	133.7	119.3
87.5°	30.0	39.1	42.4	63.9	87.4	58.7	38.5	37.8	53.5	39.8	33.3
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°	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6	1801.6
2.5°	1814.6	1811.4	1798.3	1780.7	1762.5	1744.8	1739.0	1726.6	1718.1	1713.5	1718.8
5°	1851.1	1840.7	1810.1	1770.9	1729.9	1685.5	1654.2	1625.5	1604.7	1585.1	1592.9
7.5°	1903.3	1885.0	1832.2	1763.8	1690.7	1617.0	1562.3	1520.5	1492.5	1474.3	1478.2
10°	1963.9	1935.9	1855.0	1752.7	1639.9	1534.2	1469.7	1433.8	1416.2	1406.4	1409.0
12.5°	2033.7	1993.9	1878.5	1727.2	1562.3	1441.7	1397.3	1386.9	1387.5	1388.2	1389.5
15°	2119.8	2064.3	1897.4	1671.8	1461.2	1370.6	1362.8	1379.7	1397.3	1405.8	1405.1
17.5°	2216.9	2138.7	1900.7	1580.5	1362.1	1324.9	1349.7	1386.2	1413.0	1424.7	1427.3
20°	2321.2	2214.3	1877.2	1451.4	1280.6	1287.8	1332.1	1379.1	1408.4	1423.4	1427.3
22.5°	2440.6	2295.2	1821.1	1315.8	1214.1	1247.3	1299.5	1345.1	1375.8	1390.8	1394.7
25°	2576.8	2385.8	1733.1	1201.7	1156.7	1201.7	1253.9	1291.7	1316.5	1330.2	1334.1
27.5°	2728.1	2480.3	1615.7	1111.1	1106.5	1154.8	1197.8	1227.1	1240.2	1250.6	1254.5
30°	2880.0	2566.4	1473.6	1042.6	1062.8	1108.5	1139.1	1152.1	1156.1	1158.0	1162.6
32.5°	3044.4	2640.7	1324.3	985.9	1021.1	1063.5	1081.7	1087.6	1069.3	1056.9	1060.9
35°	3243.2	2720.3	1178.2	940.9	980.0	1016.5	1022.4	1017.2	995.7	970.2	971.5
37.5°	3489.0	2819.4	1061.5	908.9	941.5	965.7	958.5	957.2	959.1	929.2	931.1
40°	3790.3	2948.5	976.1	884.2	910.2	915.5	895.2	906.3	916.1	870.5	871.8
42.5°	4124.8	3104.3	922.0	867.2	884.2	871.8	840.5	852.9	851.6	791.6	790.9
45°	4465.8	3273.9	903.1	854.8	860.0	835.3	800.7	804.0	776.6	722.5	724.4
47.5°	4804.9	3455.8	914.8	844.4	830.0	802.0	775.3	760.9	720.5	680.1	680.1
50°	5137.4	3646.8	957.8	823.5	789.0	772.7	753.1	727.7	684.6	650.1	647.5
52.5°	5445.8	3839.2	1006.1	789.0	737.5	747.2	734.8	705.5	663.1	627.9	628.6
55°	5737.9	4031.5	1025.0	741.4	689.2	725.1	717.9	663.8	612.9	584.2	581.6
57.5°	6056.1	4263.0	1004.1	680.7	650.1	699.6	672.2	612.3	582.9	561.4	559.4
60°	6496.9	4626.2	959.1	605.7	612.9	661.8	614.9	590.1	558.1	534.0	532.7
62.5°	7229.1	5303.7	886.8	531.4	569.2	605.7	587.5	562.7	530.1	506.6	506.6
65°	8311.5	6245.2	750.5	473.4	520.3	551.0	558.1	533.4	499.5	474.7	476.0
67.5°	9224.3	6835.9	567.9	425.1	470.1	506.6	526.8	502.7	466.9	442.7	443.4
70°	9174.1	6406.9	433.6	377.5	425.8	462.9	489.0	470.1	431.6	408.8	410.8
72.5°	8148.5	5359.7	350.8	329.3	380.8	417.3	448.6	434.3	395.1	373.0	373.0
75°	5986.3	3804.6	280.4	280.4	324.7	369.7	404.3	395.1	359.3	343.6	339.1
77.5°	2523.4	1596.2	219.7	232.8	269.9	317.5	360.6	363.8	332.5	352.1	319.5
80°	670.9	440.1	167.6	183.2	211.9	262.1	313.6	312.3	278.4	260.2	241.9
82.5°	255.6	173.4	119.3	129.1	153.2	200.8	248.4	256.3	222.3	192.4	192.4
85°	98.5	74.3	73.7	77.6	89.3	133.0	187.8	194.3	167.6	142.1	146.7
87.5°	25.4	22.2	27.4	26.1	41.1	71.1	107.6	111.5	102.4	59.3	84.8
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)