

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: P882917

Luminaire Tested: **NAV-SB3A-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882917
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-SB3A-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13332 lumens
Efficiency: N/A
Efficacy: 157.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

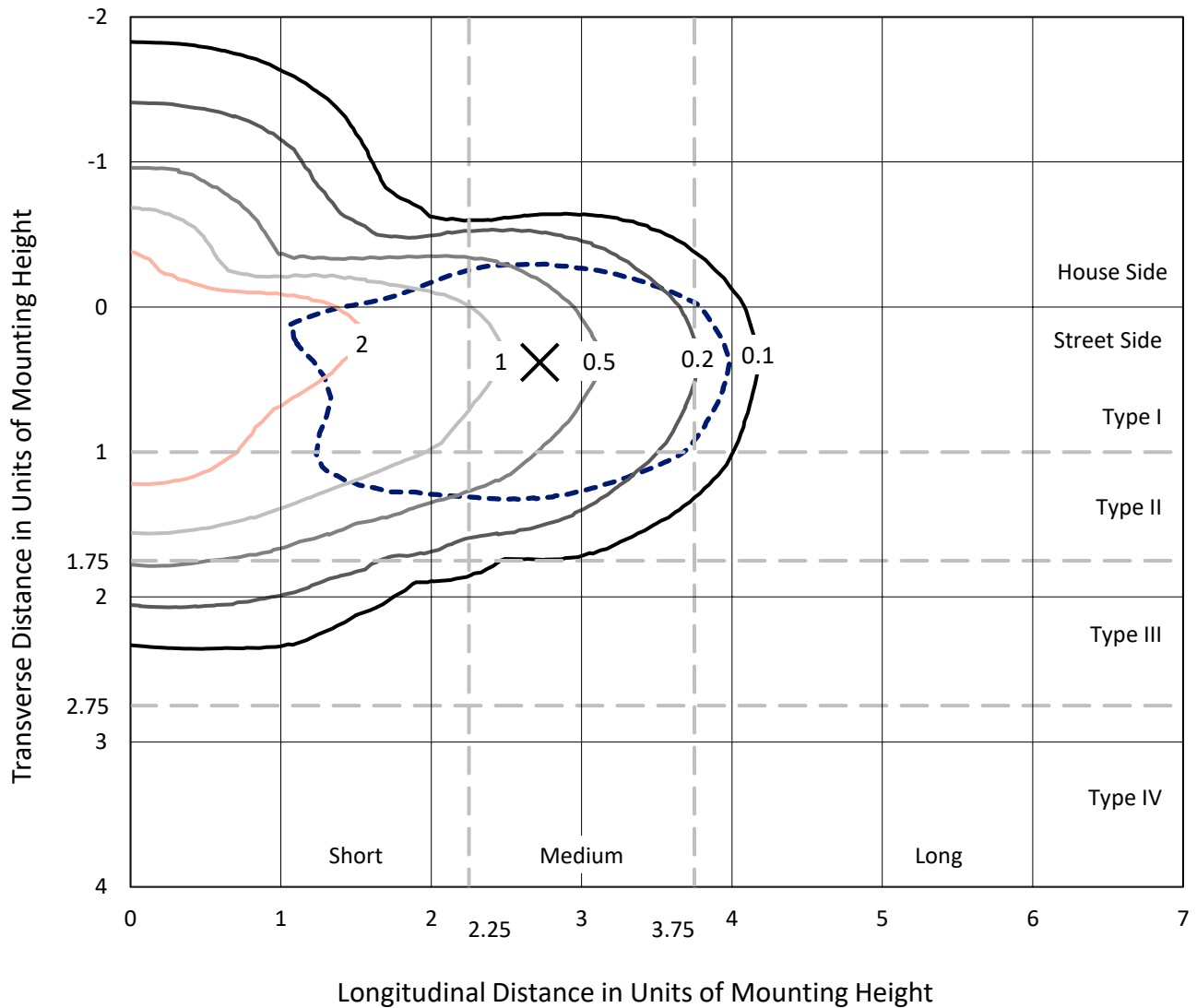
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

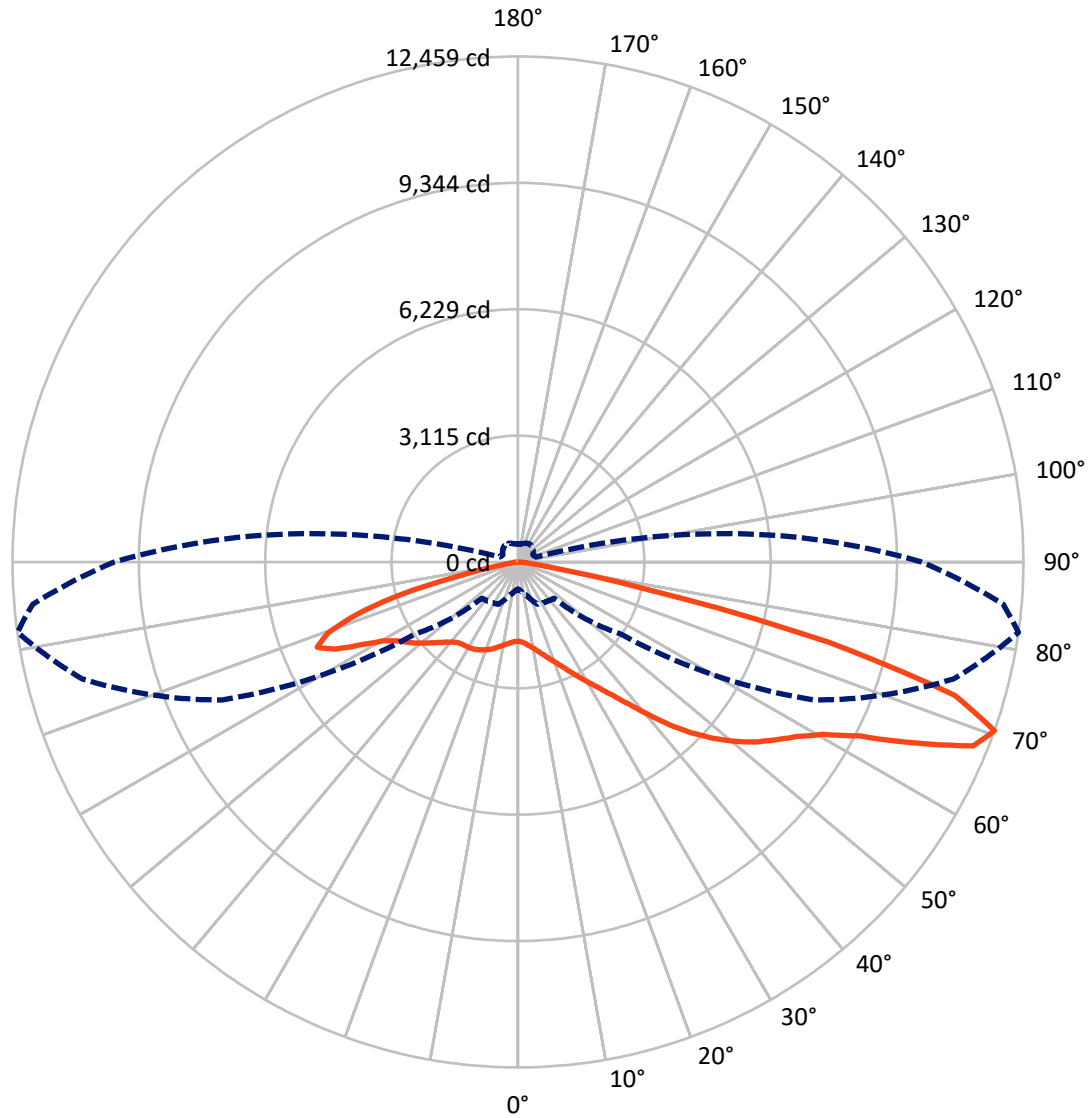
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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	3286.7	0.0	3286.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	10045.3	0.0	10045.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	13332.0	0.0	13332.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.6	1.4
10°-20°	530.2	4.0
20°-30°	887.0	6.7
30°-40°	1385.8	10.4
40°-50°	2207.0	16.6
50°-60°	3071.3	23.0
60°-70°	3212.7	24.1
70°-80°	1679.1	12.6
80°-90°	174.4	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°	13332.0	100.0
0°-180°	13332.0	100.0

Coefficient of Utilization



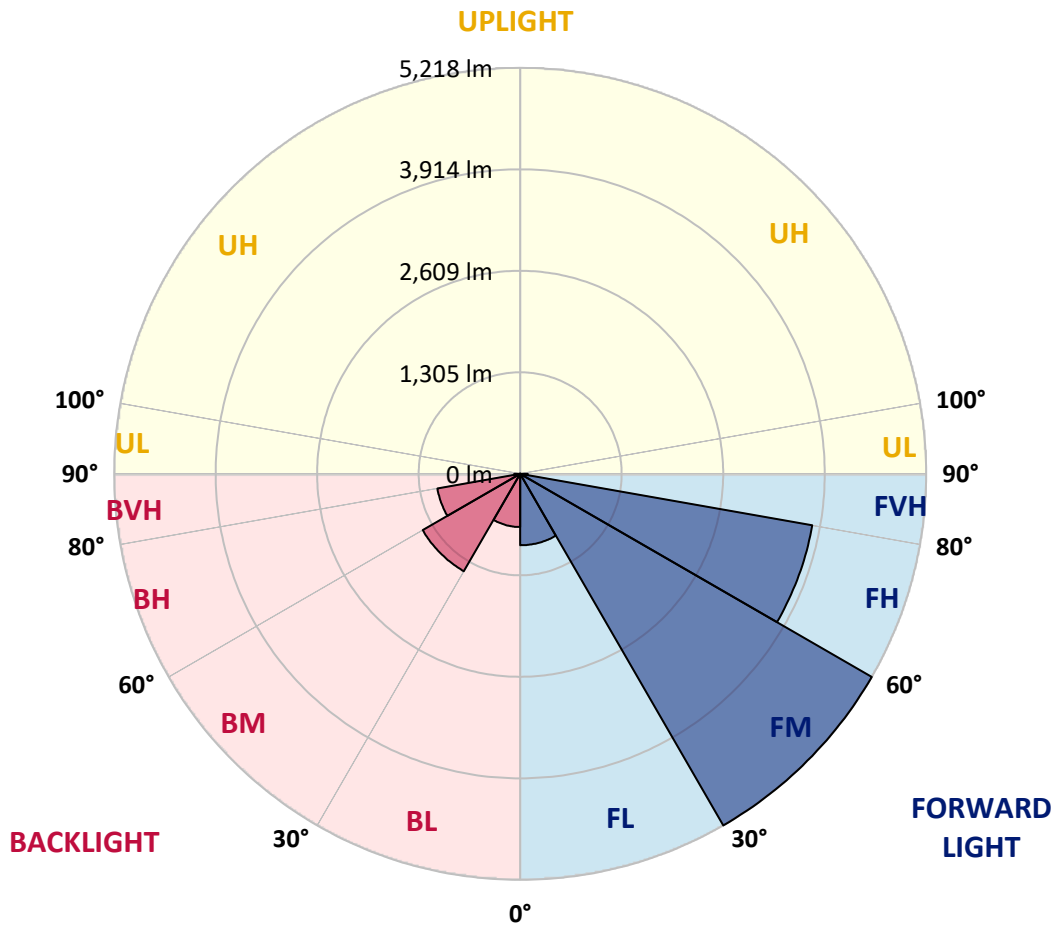
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	918.1	6.9			
FM (30°-60°)	5218.0	39.1			
FH (60°-80°)	3811.7	28.6			G2/5000
FVH (80°-90°)	97.6	0.7			G1/100
BL (0°-30°)	683.7	5.1	B2/1000		
BM (30°-60°)	1446.0	10.8	B2/2500		
BH (60°-80°)	1080.2	8.1	B3/2500		G3/2500
BVH (80°-90°)	76.8	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6
2.5°	2001.3	2012.6	2009.1	2005.6	2005.6	2000.6	1999.9	1992.8	1987.2	1978.0	1975.9
5°	2026.8	2038.8	2037.4	2040.2	2049.4	2051.6	2053.7	2049.4	2038.1	2026.8	2021.8
7.5°	2004.2	2017.6	2021.8	2038.8	2067.1	2092.6	2111.7	2119.5	2108.9	2092.6	2084.8
10°	1927.8	1942.6	1957.5	1997.8	2048.0	2108.2	2159.1	2189.5	2187.4	2171.8	2158.4
12.5°	1772.8	1788.4	1820.2	1898.8	1990.7	2096.8	2191.6	2255.3	2277.2	2265.9	2242.6
15°	1649.0	1662.5	1686.5	1767.2	1886.7	2048.0	2203.7	2327.5	2383.3	2377.0	2348.7
17.5°	1645.5	1651.1	1666.0	1704.2	1796.2	1971.6	2190.9	2398.2	2505.0	2504.3	2468.9
20°	1707.7	1709.9	1718.4	1726.1	1778.5	1913.6	2158.4	2456.9	2641.6	2641.6	2603.4
22.5°	1794.1	1792.6	1801.1	1794.1	1819.5	1908.7	2137.9	2508.6	2793.7	2805.0	2756.9
25°	1923.5	1916.4	1914.3	1898.0	1903.0	1954.6	2160.5	2567.3	2974.0	2997.4	2937.3
27.5°	2096.1	2084.8	2077.0	2039.5	2026.8	2049.4	2229.8	2638.0	3175.0	3215.3	3138.9
30°	2321.1	2300.6	2289.3	2224.2	2178.2	2181.7	2334.5	2732.1	3385.1	3450.2	3353.2
32.5°	2628.1	2596.3	2565.9	2459.0	2374.9	2347.3	2469.6	2862.3	3612.9	3716.9	3592.3
35°	2971.9	2946.5	2913.9	2749.1	2619.6	2556.0	2652.2	3044.1	3879.6	4044.4	3882.4
37.5°	3303.0	3281.1	3296.6	3074.5	2907.6	2814.9	2891.3	3288.1	4208.5	4451.9	4246.0
40°	3645.4	3628.4	3630.5	3418.3	3223.8	3119.8	3181.3	3594.5	4585.6	4936.5	4683.2
42.5°	4017.5	4004.8	3962.3	3774.2	3555.6	3458.6	3515.2	3948.2	4990.2	5488.3	5162.8
45°	4434.2	4426.4	4386.8	4171.0	3920.6	3811.7	3888.1	4338.7	5397.0	6007.5	5644.6
47.5°	4794.3	4800.6	4795.7	4613.9	4354.3	4194.4	4285.6	4746.2	5775.5	6495.7	6106.6
50°	4967.6	5000.8	5049.7	4993.1	4831.8	4669.1	4686.7	5139.5	6136.3	6953.4	6549.4
52.5°	4877.0	4940.0	5073.0	5163.6	5225.8	5191.9	5144.5	5530.0	6475.8	7366.5	6968.2
55°	4539.6	4628.0	4848.7	5067.3	5385.0	5631.9	5694.1	5963.0	6806.9	7730.1	7364.4
57.5°	3924.8	4068.4	4266.5	4708.7	5243.5	5844.8	6335.1	6563.6	7157.8	8118.5	7778.9
60°	2870.8	3063.2	3309.4	3967.3	4748.3	5730.9	6880.5	7486.1	7656.5	8621.5	8318.7
62.5°	1837.2	1956.1	2182.4	2802.1	3699.9	5147.3	7047.4	8639.2	8501.9	9446.4	9128.0
65°	1257.8	1334.2	1541.5	1889.6	2391.8	3831.5	6600.4	9503.7	9844.6	10753.7	10511.7
67.5°	914.0	972.0	1148.9	1453.8	1558.5	2267.3	5121.8	9464.0	11149.9	12100.6	11724.3
70°	666.4	707.4	856.0	1148.9	1199.1	1261.4	3102.8	8044.9	11121.6	12458.6	12008.0
72.5°	493.8	522.1	621.8	891.4	970.6	851.7	1535.8	5846.9	9556.7	11268.7	10907.2
75°	357.3	378.5	452.0	682.0	776.8	648.7	766.2	3416.9	6666.1	7926.8	7990.5
77.5°	273.1	289.3	337.4	499.4	621.8	486.7	475.4	1571.9	3160.8	3176.4	3354.6
80°	219.3	229.9	256.1	351.6	476.8	364.3	309.9	634.6	998.9	845.4	887.1
82.5°	161.3	179.0	216.5	246.9	341.0	251.1	188.9	320.5	379.9	326.8	329.7
85°	92.0	104.0	130.9	176.9	217.9	153.5	108.2	142.2	176.9	145.0	129.5
87.5°	32.5	42.4	46.0	69.3	94.8	63.7	41.7	41.0	58.0	43.2	36.1
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°	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6	1954.6
2.5°	1968.8	1965.2	1951.1	1932.0	1912.2	1893.1	1886.7	1873.3	1864.1	1859.1	1864.8
5°	2008.4	1997.1	1963.8	1921.4	1876.8	1828.7	1794.8	1763.6	1741.0	1719.8	1728.3
7.5°	2065.0	2045.2	1987.9	1913.6	1834.4	1754.4	1695.0	1649.7	1619.3	1599.5	1603.8
10°	2130.8	2100.4	2012.6	1901.6	1779.2	1664.6	1594.6	1555.6	1536.5	1525.9	1528.8
12.5°	2206.5	2163.3	2038.1	1874.0	1695.0	1564.1	1516.0	1504.7	1505.4	1506.1	1507.5
15°	2299.9	2239.7	2058.6	1813.9	1585.4	1487.0	1478.5	1496.9	1516.0	1525.2	1524.5
17.5°	2405.3	2320.4	2062.2	1714.8	1477.8	1437.5	1464.4	1504.0	1533.0	1545.7	1548.6
20°	2518.5	2402.4	2036.7	1574.7	1389.4	1397.2	1445.3	1496.2	1528.1	1544.3	1548.6
22.5°	2647.9	2490.2	1975.9	1427.6	1317.2	1353.3	1409.9	1459.4	1492.7	1509.0	1513.2
25°	2795.8	2588.5	1880.4	1303.8	1255.0	1303.8	1360.4	1401.4	1428.3	1443.2	1447.4
27.5°	2959.9	2691.1	1753.0	1205.5	1200.5	1252.9	1299.6	1331.4	1345.5	1356.9	1361.1
30°	3124.7	2784.5	1598.8	1131.2	1153.1	1202.6	1235.9	1250.0	1254.3	1256.4	1261.4
32.5°	3303.0	2865.1	1436.8	1069.6	1107.8	1153.8	1173.6	1180.0	1160.2	1146.7	1151.0
35°	3518.8	2951.4	1278.3	1020.8	1063.3	1102.9	1109.3	1103.6	1080.3	1052.7	1054.1
37.5°	3785.5	3058.9	1151.7	986.2	1021.5	1047.7	1039.9	1038.5	1040.6	1008.1	1010.2
40°	4112.3	3199.0	1059.0	959.3	987.6	993.2	971.3	983.3	993.9	944.4	945.8
42.5°	4475.2	3368.1	1000.3	940.9	959.3	945.8	911.9	925.3	923.9	858.8	858.1
45°	4845.2	3552.0	979.8	927.4	933.1	906.2	868.7	872.3	842.6	783.8	786.0
47.5°	5213.1	3749.4	992.5	916.1	900.6	870.1	841.1	825.6	781.7	737.9	737.9
50°	5573.9	3956.7	1039.2	893.5	856.0	838.3	817.1	789.5	742.8	705.3	702.5
52.5°	5908.5	4165.4	1091.6	856.0	800.1	810.7	797.3	765.4	719.5	681.3	682.0
55°	6225.4	4374.1	1112.1	804.4	747.8	786.7	778.9	720.2	665.0	633.9	631.0
57.5°	6570.6	4625.2	1089.4	738.6	705.3	759.1	729.4	664.3	632.4	609.1	607.0
60°	7048.9	5019.2	1040.6	657.2	665.0	718.0	667.1	640.2	605.6	579.4	578.0
62.5°	7843.3	5754.3	962.1	576.6	617.6	657.2	637.4	610.5	575.1	549.7	549.7
65°	9017.7	6775.8	814.3	513.6	564.5	597.8	605.6	578.7	541.9	515.0	516.4
67.5°	10008.1	7416.7	616.2	461.2	510.1	549.7	571.6	545.4	506.5	480.3	481.1
70°	9953.6	6951.2	470.4	409.6	462.0	502.3	530.6	510.1	468.3	443.6	445.7
72.5°	8840.8	5815.1	380.6	357.3	413.1	452.8	486.7	471.2	428.7	404.7	404.7
75°	6494.9	4127.9	304.2	304.2	352.3	401.1	438.6	428.7	389.8	372.8	367.9
77.5°	2737.8	1731.8	238.4	252.6	292.9	344.5	391.2	394.7	360.8	382.0	346.6
80°	727.9	477.5	181.8	198.8	229.9	284.4	340.3	338.9	302.1	282.3	262.5
82.5°	277.3	188.2	129.5	140.1	166.2	217.9	269.5	278.0	241.2	208.7	208.7
85°	106.8	80.6	79.9	84.2	96.9	144.3	203.7	210.8	181.8	154.2	159.2
87.5°	27.6	24.1	29.7	28.3	44.6	77.1	116.7	121.0	111.1	64.4	92.0
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)