

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: P882926

Luminaire Tested: **NAV-SB3A-740-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882926
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10593 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

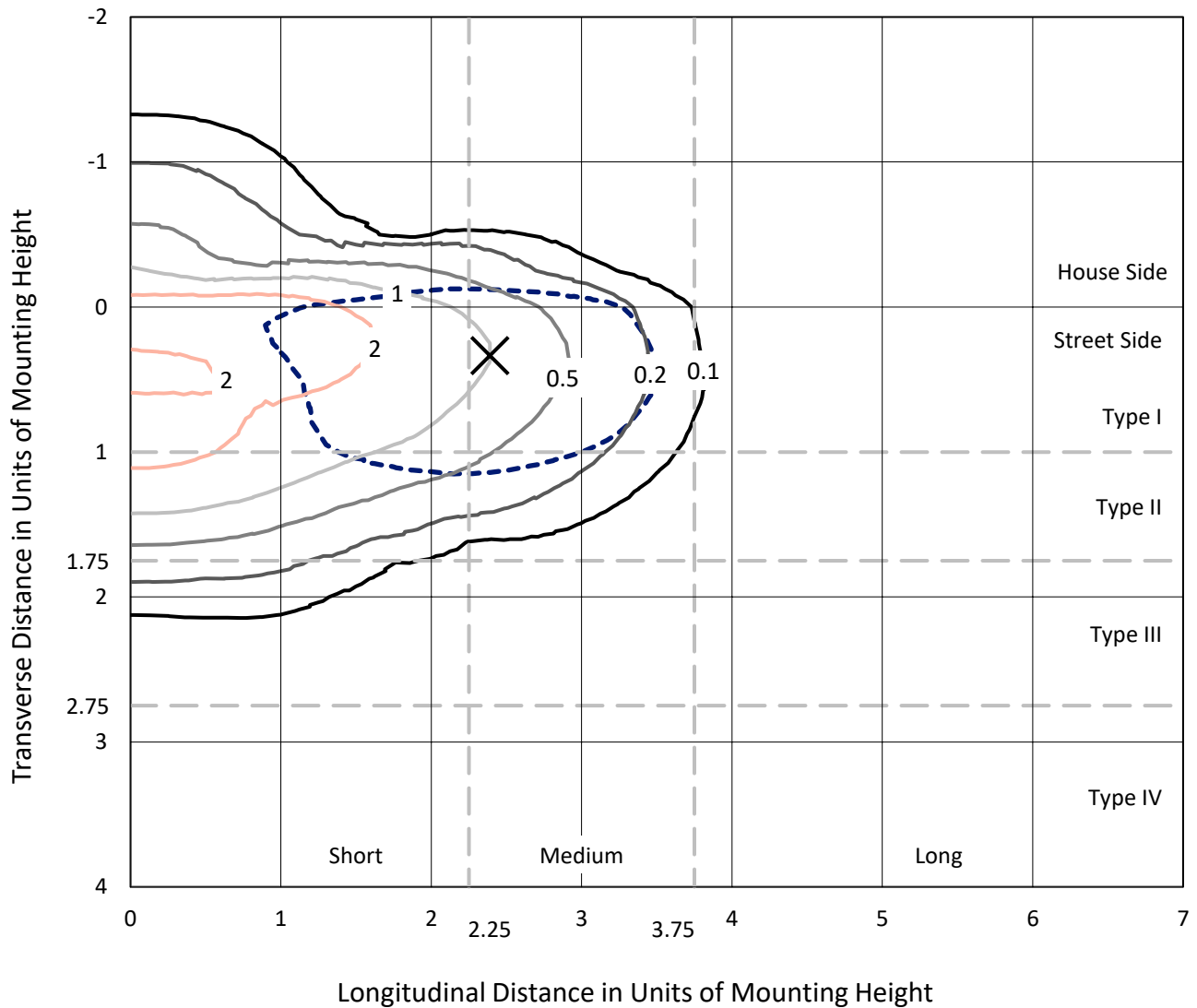
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

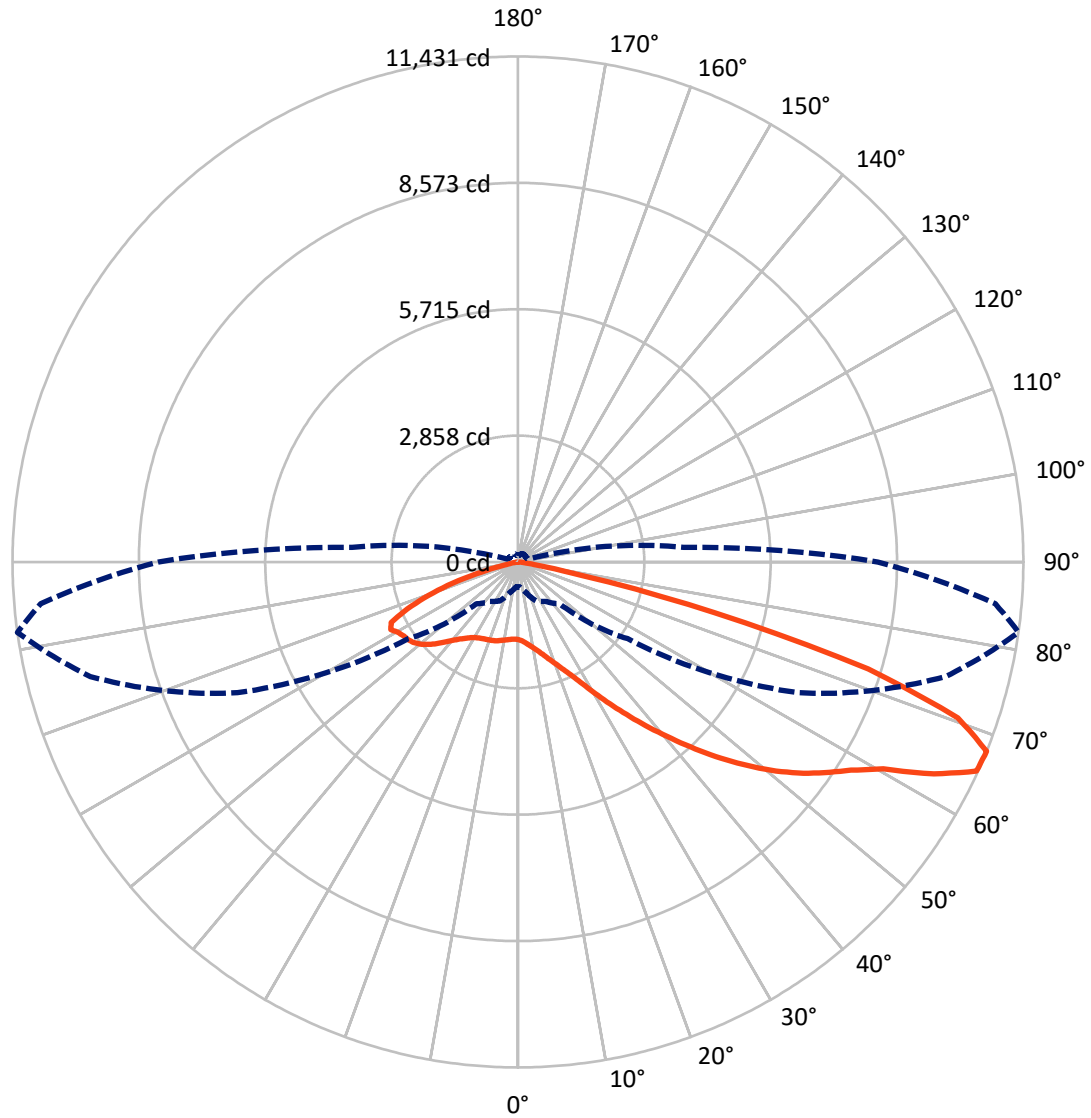
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1918.8	0.0	1918.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8674.2	0.0	8674.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	10593.0	0.0	10593.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.3	1.5
10°-20°	406.3	3.8
20°-30°	650.7	6.1
30°-40°	1150.7	10.9
40°-50°	2016.2	19.0
50°-60°	2689.0	25.4
60°-70°	2503.3	23.6
70°-80°	960.8	9.1
80°-90°	59.7	0.6
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°	10593.0	100.0
0°-180°	10593.0	100.0

Coefficient of Utilization



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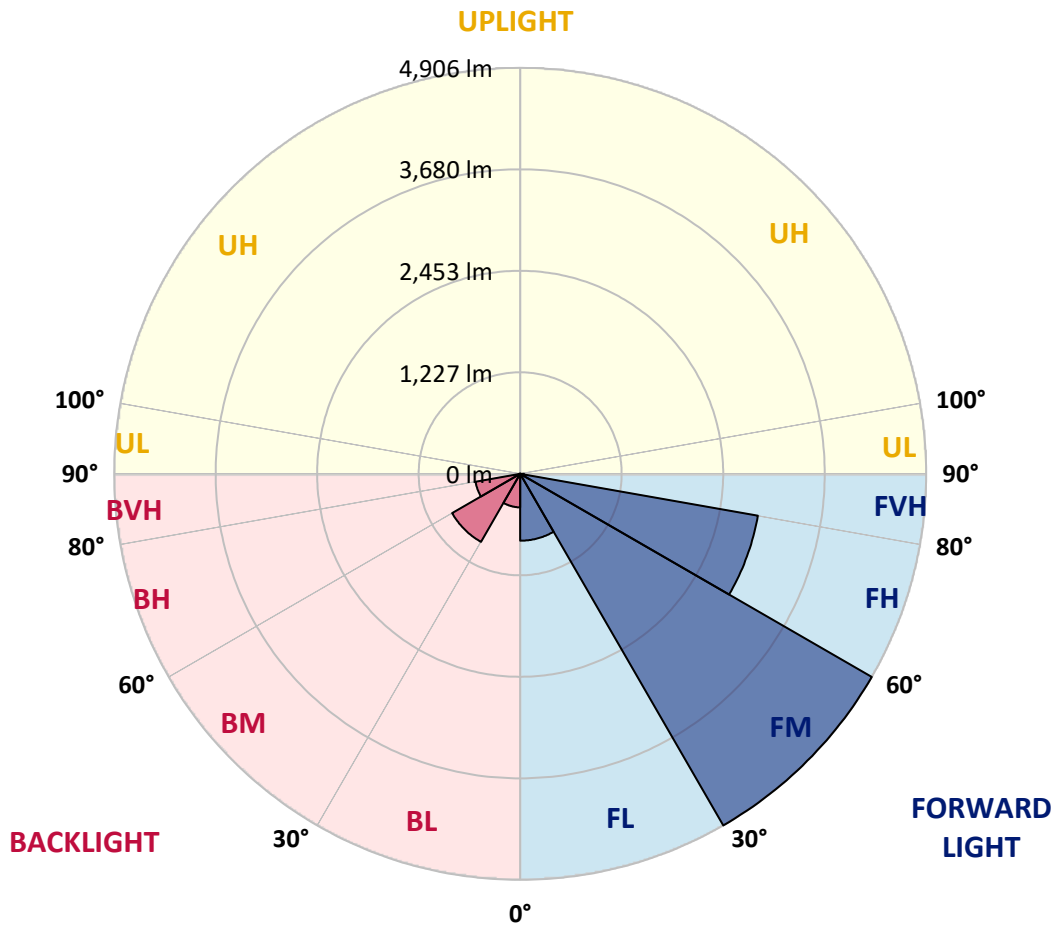
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	808.1	7.6			
FM (30°-60°)	4906.2	46.3			
FH (60°-80°)	2916.4	27.5			G2/5000
FVH (80°-90°)	43.4	0.4			G1/100
BL (0°-30°)	405.3	3.8	B1/500		
BM (30°-60°)	949.6	9.0	B1/1000		
BH (60°-80°)	547.7	5.2	B2/1000		G2/1000
BVH (80°-90°)	16.3	0.2			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°	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9
2.5°	1854.8	1865.5	1859.4	1856.3	1851.0	1843.4	1837.3	1818.2	1798.4	1785.4	1780.8
5°	1892.2	1902.9	1902.1	1905.1	1909.0	1911.2	1909.7	1888.4	1860.1	1838.0	1825.1
7.5°	1860.1	1872.4	1882.3	1897.5	1924.2	1952.4	1966.2	1961.6	1932.6	1902.1	1886.1
10°	1769.4	1782.4	1806.0	1841.8	1898.3	1959.3	2010.4	2034.0	2015.7	1982.2	1960.1
12.5°	1603.1	1616.1	1662.6	1740.4	1835.0	1941.0	2038.6	2101.9	2106.5	2072.9	2047.0
15°	1416.3	1429.2	1478.8	1576.4	1720.6	1890.7	2053.9	2173.6	2214.0	2185.0	2153.8
17.5°	1300.4	1311.8	1349.2	1427.7	1578.0	1790.0	2048.5	2249.9	2342.2	2319.3	2281.9
20°	1265.3	1275.2	1292.7	1347.6	1472.7	1685.5	2013.4	2321.6	2480.2	2467.2	2425.3
22.5°	1302.6	1311.8	1317.1	1341.5	1420.1	1616.9	1969.2	2394.8	2640.4	2641.9	2590.8
25°	1388.8	1398.0	1391.9	1407.1	1441.4	1595.5	1952.4	2481.0	2841.7	2858.5	2800.5
27.5°	1530.7	1531.4	1516.9	1516.2	1521.5	1627.5	1970.0	2573.2	3095.7	3126.9	3055.3
30°	1815.2	1803.7	1748.0	1687.8	1660.3	1723.6	2018.8	2682.3	3395.4	3451.1	3361.1
32.5°	2253.7	2236.9	2134.7	1990.6	1845.7	1878.5	2106.5	2806.6	3721.8	3822.5	3712.7
35°	2729.6	2725.0	2618.2	2403.9	2150.7	2098.9	2249.1	2969.8	4078.0	4238.2	4107.7
37.5°	3171.9	3169.7	3108.6	2856.2	2548.1	2406.2	2477.9	3183.4	4459.3	4691.2	4537.1
40°	3576.2	3583.0	3522.0	3296.3	2985.8	2800.5	2789.1	3447.3	4883.4	5184.6	5001.6
42.5°	3925.5	3933.1	3871.3	3704.3	3418.3	3236.8	3171.2	3770.6	5297.5	5714.7	5498.1
45°	4162.6	4209.9	4200.8	4067.3	3862.2	3673.8	3630.3	4176.4	5769.6	6276.8	6022.8
47.5°	4229.8	4273.2	4341.9	4360.2	4235.1	4049.8	4101.6	4665.2	6247.0	6839.6	6550.6
50°	4064.3	4104.7	4247.3	4437.2	4524.2	4467.0	4560.0	5189.2	6735.9	7400.9	7068.4
52.5°	3737.8	3779.0	3959.0	4259.5	4614.1	4794.1	5019.9	5705.5	7209.5	7932.5	7558.8
55°	3265.7	3309.2	3540.3	3880.5	4442.5	4929.1	5403.5	6221.1	7643.5	8410.7	8001.2
57.5°	2623.6	2655.6	2895.9	3371.8	4010.9	4794.9	5686.5	6783.9	8052.3	8880.5	8439.7
60°	1709.9	1738.1	2017.3	2548.1	3295.5	4346.5	5742.9	7411.6	8595.3	9491.4	9030.8
62.5°	1137.1	1156.2	1321.7	1711.4	2320.8	3485.4	5412.7	7912.7	9391.5	10554.6	10044.4
65°	780.2	799.3	964.8	1236.3	1499.4	2305.5	4463.1	7846.3	10113.0	11398.9	10795.6
67.5°	556.7	572.8	713.1	969.4	1085.3	1339.2	3025.5	6998.3	10009.3	11430.9	10836.0
70°	398.9	408.0	524.0	755.0	862.6	804.6	1682.4	5352.4	8763.8	10555.3	10010.8
72.5°	279.1	282.2	363.8	575.1	694.8	587.3	800.8	3568.5	6628.4	8284.9	7760.9
75°	189.1	193.0	244.8	421.8	557.5	448.4	424.0	1913.5	3891.1	4585.9	4110.8
77.5°	115.9	117.5	157.9	288.3	417.2	341.7	273.0	810.7	1505.5	1478.1	1259.9
80°	65.6	65.6	100.7	179.2	284.5	220.4	191.4	344.7	476.7	418.7	369.1
82.5°	36.6	37.4	73.2	111.3	188.4	130.4	105.2	159.4	205.9	182.3	158.6
85°	15.3	16.8	45.0	52.6	90.0	64.8	42.7	67.1	76.3	67.9	49.6
87.5°	1.5	2.3	13.7	9.9	10.7	13.0	6.1	13.0	10.7	10.7	7.6
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°	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9	1754.9
2.5°	1766.3	1754.9	1725.9	1692.4	1648.1	1626.8	1597.8	1578.0	1561.2	1562.7	1547.5
5°	1800.7	1771.7	1706.9	1626.0	1525.3	1453.6	1377.4	1324.8	1282.0	1272.9	1252.3
7.5°	1847.9	1802.2	1688.5	1542.9	1372.8	1243.9	1128.8	1054.8	1002.1	985.4	968.6
10°	1909.0	1842.6	1664.9	1438.4	1193.6	1029.6	906.1	848.1	812.2	800.0	790.9
12.5°	1979.9	1889.1	1633.6	1311.0	1009.0	851.1	772.6	743.6	732.2	728.3	726.1
15°	2069.1	1947.1	1586.4	1160.0	852.7	742.1	708.5	704.7	706.2	704.7	703.9
17.5°	2175.1	2010.4	1509.3	1004.4	747.4	686.4	674.2	677.3	681.1	680.3	678.8
20°	2291.1	2072.9	1410.9	866.4	675.7	646.7	639.9	642.9	646.0	644.5	643.7
22.5°	2423.0	2140.0	1301.9	758.9	627.7	610.1	602.5	603.3	603.3	600.2	598.7
25°	2580.9	2214.0	1187.5	682.6	591.1	577.3	568.2	565.1	560.6	551.4	549.9
27.5°	2769.3	2292.6	1077.7	629.2	562.1	549.1	538.4	530.8	519.4	504.1	502.6
30°	2981.3	2387.9	984.6	595.6	539.2	526.2	514.0	502.6	485.8	466.8	465.2
32.5°	3230.7	2490.1	916.7	573.5	518.6	504.9	490.4	476.7	458.4	439.3	440.1
35°	3528.1	2613.7	877.1	558.3	502.6	484.3	468.3	453.0	439.3	422.5	421.0
37.5°	3850.7	2744.8	864.9	550.6	491.9	463.7	445.4	434.7	433.2	423.3	422.5
40°	4203.8	2900.4	874.0	546.1	480.5	443.9	424.0	421.8	425.6	408.0	408.8
42.5°	4577.5	3085.0	889.3	540.7	464.5	424.0	405.0	405.0	401.9	377.5	377.5
45°	4981.8	3297.8	904.5	527.8	445.4	404.2	389.7	384.4	371.4	347.8	347.0
47.5°	5389.0	3514.4	916.0	504.1	422.5	387.4	374.5	362.3	343.2	321.8	321.1
50°	5775.7	3708.9	903.8	469.0	396.6	371.4	357.7	340.9	320.3	305.8	303.5
52.5°	6121.2	3877.4	851.9	427.9	369.1	354.6	342.4	324.9	308.1	292.9	291.3
55°	6421.7	4013.9	760.4	389.0	344.7	340.2	327.9	305.8	283.0	270.0	268.5
57.5°	6710.0	4117.7	646.0	356.9	322.6	324.1	305.8	286.0	264.6	250.9	249.4
60°	7093.6	4256.5	530.1	327.2	299.0	303.5	283.7	269.2	242.5	225.0	222.7
62.5°	7706.8	4472.3	421.0	290.6	271.5	273.0	264.6	247.1	215.1	194.5	193.0
65°	8193.4	4393.0	331.8	250.9	240.2	242.5	242.5	223.5	189.1	165.5	163.2
67.5°	8138.4	3761.5	264.6	212.0	210.5	212.0	217.4	201.3	167.8	148.7	145.7
70°	7497.0	2992.0	212.0	176.2	183.0	179.2	194.5	183.8	151.0	131.9	129.7
72.5°	6117.4	2155.3	161.7	145.7	140.3	146.4	175.4	165.5	125.8	104.5	102.2
75°	3574.6	1150.1	120.5	115.2	101.4	122.0	155.6	141.1	96.1	77.0	74.7
77.5°	1163.8	401.2	88.5	84.7	75.5	98.4	132.7	119.0	78.6	61.0	58.7
80°	311.9	121.3	60.3	55.7	48.8	73.2	105.2	94.6	56.4	39.7	38.9
82.5°	125.1	51.1	35.1	31.3	26.7	50.3	83.1	76.3	41.9	25.2	25.2
85°	40.4	16.8	13.0	9.9	12.2	31.3	49.6	51.9	29.7	13.0	9.9
87.5°	5.3	2.3	2.3	3.1	2.3	5.3	15.3	14.5	8.4	1.5	0.0
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)