

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: P882897

Luminaire Tested: **NAV-SB3A-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882897
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-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12082 lumens
Efficiency: N/A
Efficacy: 142.6 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

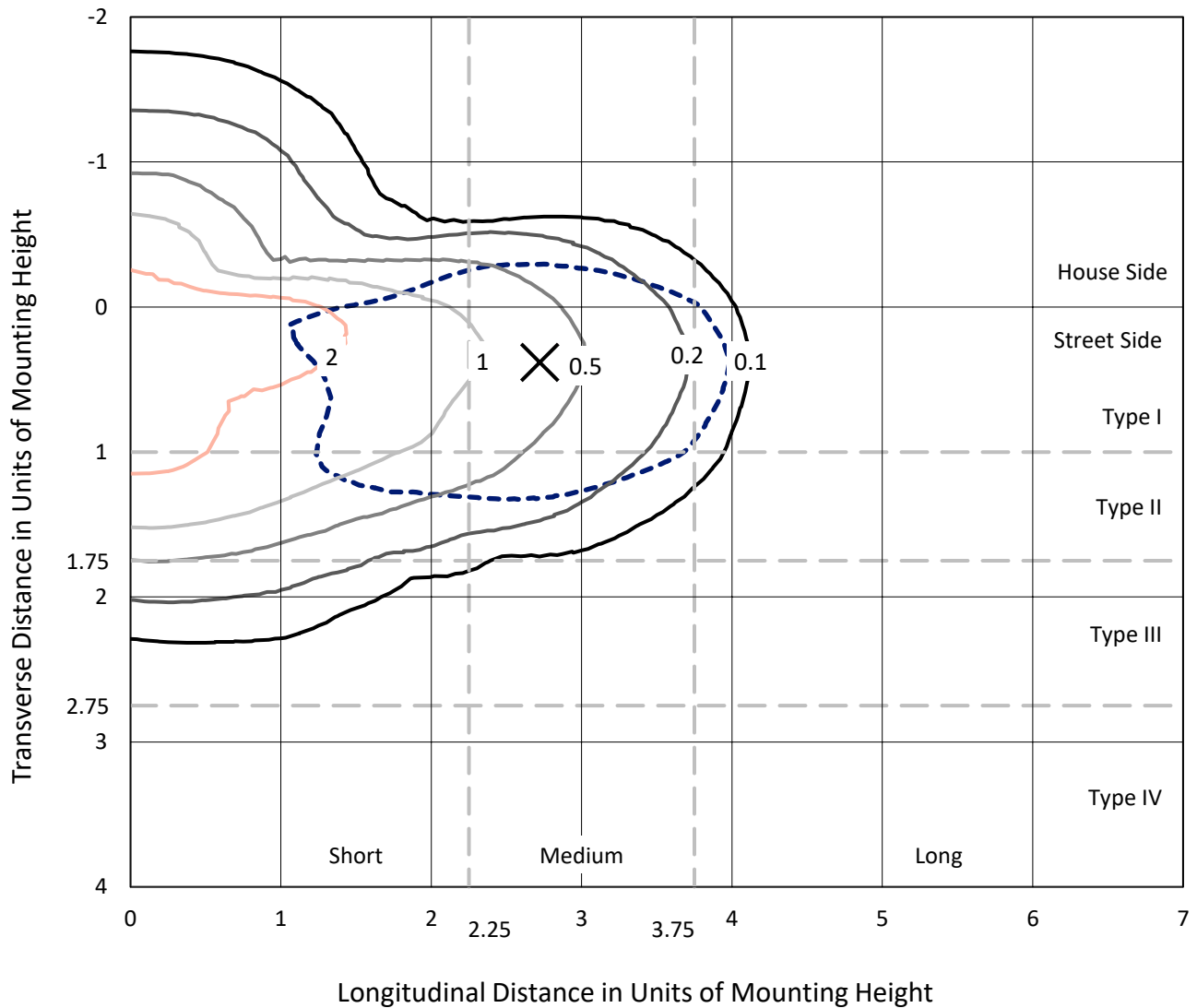
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

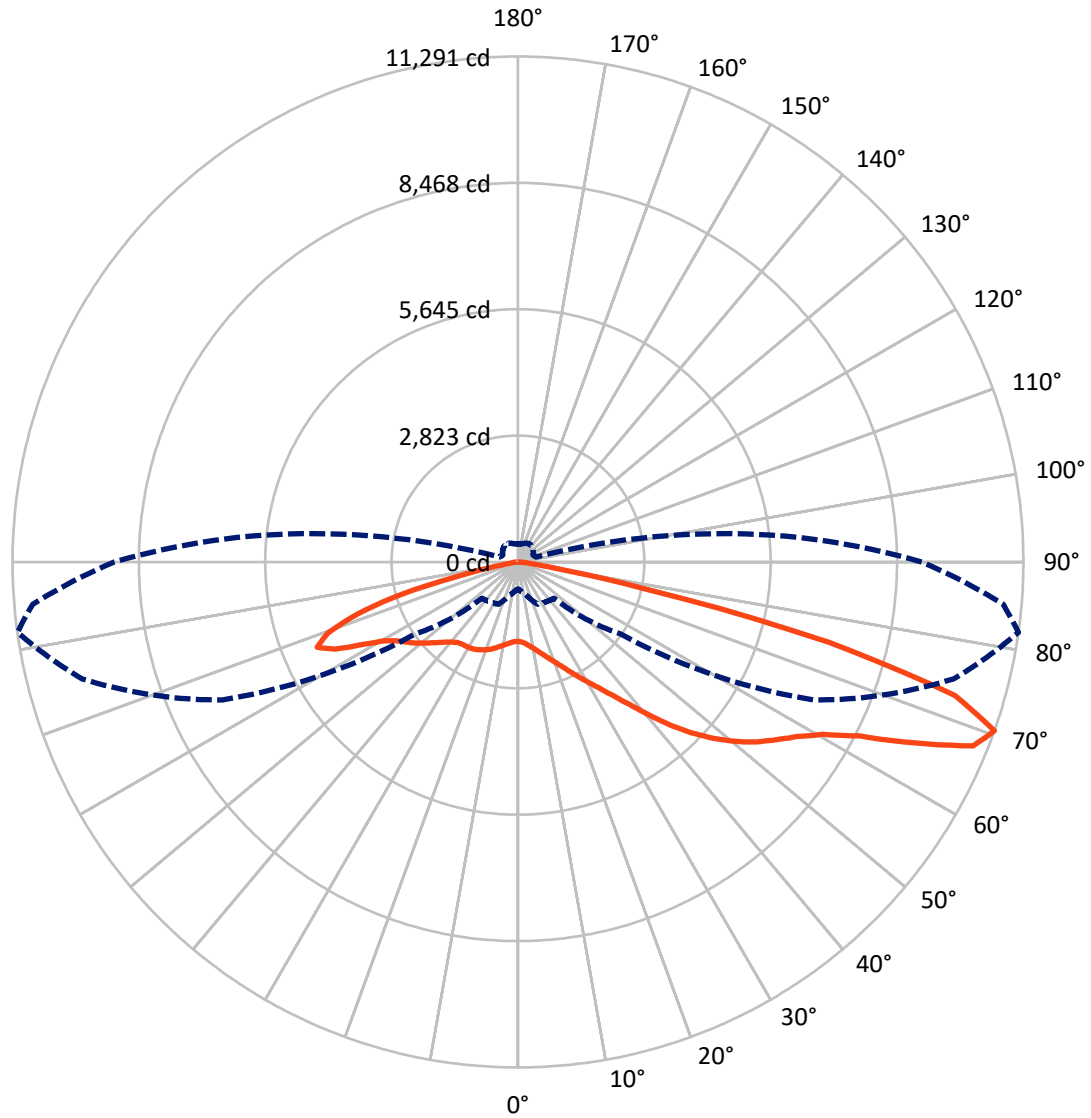
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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	2978.5	0.0	2978.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	9103.5	0.0	9103.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	12082.0	0.0	12082.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.2	1.4
10°-20°	480.5	4.0
20°-30°	803.9	6.7
30°-40°	1255.8	10.4
40°-50°	2000.1	16.6
50°-60°	2783.3	23.0
60°-70°	2911.5	24.1
70°-80°	1521.7	12.6
80°-90°	158.0	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°	12082.0	100.0
0°-180°	12082.0	100.0

Coefficient of Utilization

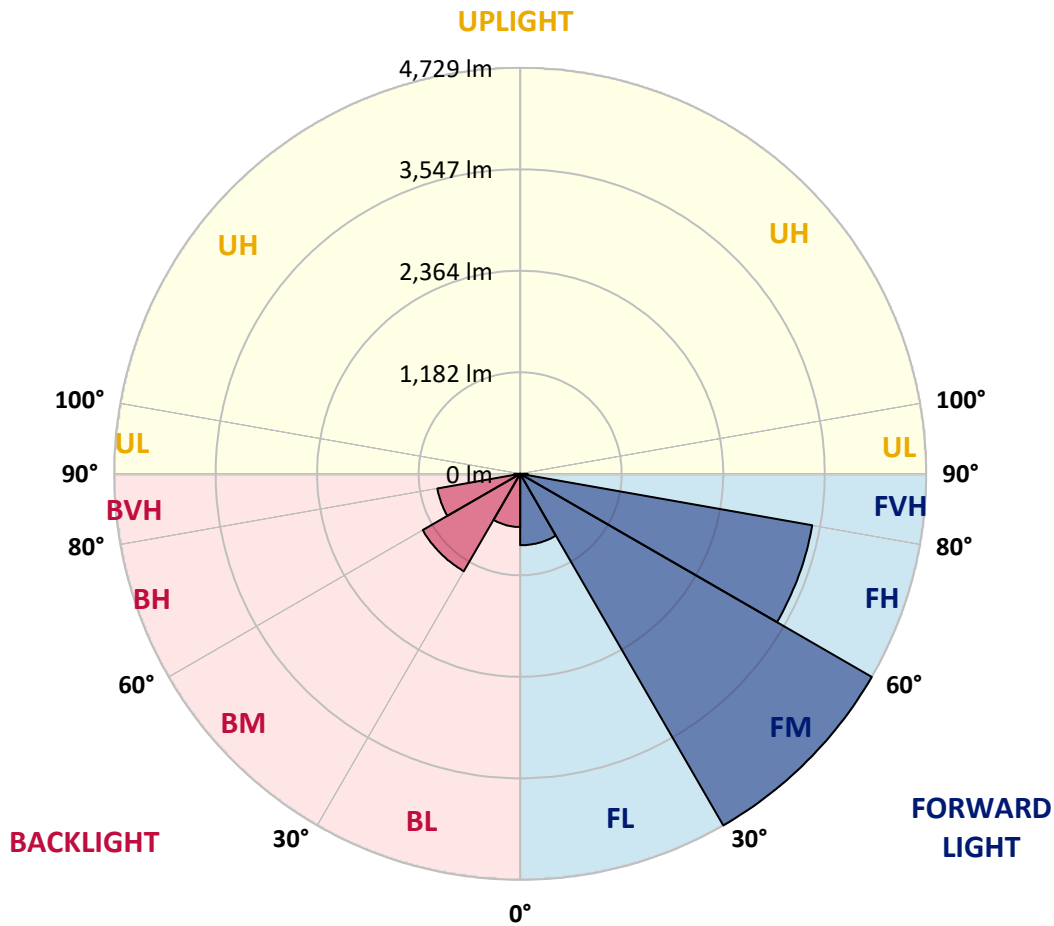


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	832.0	6.9			
FM (30°-60°)	4728.8	39.1			
FH (60°-80°)	3454.3	28.6			G2/5000
FVH (80°-90°)	88.5	0.7			G1/100
BL (0°-30°)	619.6	5.1	B2/1000		
BM (30°-60°)	1310.4	10.8	B2/2500		
BH (60°-80°)	978.9	8.1	B2/1000		G2/1000
BVH (80°-90°)	69.6	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



REPORT NUMBER: P882897
 CATALOG NUMBER: NAV-SB3A-727-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4
2.5°	1813.7	1823.9	1820.7	1817.5	1817.5	1813.0	1812.4	1806.0	1800.9	1792.5	1790.6
5°	1836.8	1847.7	1846.4	1848.9	1857.3	1859.2	1861.1	1857.3	1847.0	1836.8	1832.3
7.5°	1816.2	1828.4	1832.3	1847.7	1873.3	1896.4	1913.7	1920.7	1911.1	1896.4	1889.3
10°	1747.0	1760.5	1773.9	1810.5	1856.0	1910.5	1956.7	1984.2	1982.3	1968.2	1956.0
12.5°	1606.6	1620.7	1649.6	1720.7	1804.1	1900.2	1986.1	2043.8	2063.7	2053.5	2032.3
15°	1494.4	1506.6	1528.4	1601.5	1709.8	1856.0	1997.0	2109.2	2159.9	2154.1	2128.5
17.5°	1491.2	1496.3	1509.8	1544.4	1627.8	1786.8	1985.5	2173.3	2270.2	2269.5	2237.5
20°	1547.6	1549.6	1557.2	1564.3	1611.7	1734.2	1956.0	2226.6	2393.9	2393.9	2359.3
22.5°	1625.8	1624.6	1632.3	1625.8	1648.9	1729.7	1937.4	2273.4	2531.7	2542.0	2498.4
25°	1743.2	1736.8	1734.8	1720.1	1724.6	1771.4	1957.9	2326.6	2695.2	2716.4	2661.9
27.5°	1899.6	1889.3	1882.3	1848.3	1836.8	1857.3	2020.8	2390.7	2877.3	2913.8	2844.6
30°	2103.5	2084.9	2074.6	2015.6	1974.0	1977.2	2115.6	2475.9	3067.7	3126.7	3038.8
32.5°	2381.7	2352.9	2325.3	2228.5	2152.2	2127.2	2238.1	2593.9	3274.1	3368.4	3255.5
35°	2693.3	2670.2	2640.7	2491.3	2374.0	2316.3	2403.5	2758.7	3515.8	3665.2	3518.4
37.5°	2993.3	2973.4	2987.5	2786.2	2634.9	2551.0	2620.2	2979.9	3813.9	4034.5	3847.9
40°	3303.6	3288.2	3290.1	3097.8	2921.5	2827.3	2883.0	3257.5	4155.6	4473.6	4244.1
42.5°	3640.8	3629.3	3590.8	3420.3	3222.2	3134.4	3185.6	3578.0	4522.4	4973.7	4678.8
45°	4018.4	4011.4	3975.5	3780.0	3553.0	3454.3	3523.5	3931.9	4891.0	5444.3	5115.4
47.5°	4344.8	4350.5	4346.0	4181.3	3946.0	3801.1	3883.8	4301.2	5234.0	5886.6	5534.0
50°	4501.8	4532.0	4576.2	4524.9	4378.7	4231.3	4247.3	4657.6	5560.9	6301.4	5935.3
52.5°	4419.8	4476.8	4597.4	4679.4	4735.8	4705.1	4662.1	5011.5	5868.7	6675.8	6314.9
55°	4114.0	4194.1	4394.1	4592.2	4880.1	5103.8	5160.3	5403.9	6168.7	7005.4	6673.9
57.5°	3556.8	3687.0	3866.5	4267.2	4751.9	5296.8	5741.1	5948.2	6486.7	7357.3	7049.6
60°	2601.6	2776.0	2999.1	3595.3	4303.1	5193.6	6235.4	6784.2	6938.7	7813.1	7538.8
62.5°	1664.9	1772.7	1977.8	2539.4	3353.0	4664.7	6386.7	7829.2	7704.8	8560.7	8272.2
65°	1139.9	1209.1	1397.0	1712.4	2167.6	3472.2	5981.5	8612.6	8921.6	9745.4	9526.2
67.5°	828.3	880.9	1041.2	1317.5	1412.4	2054.7	4641.6	8576.7	10104.5	10966.1	10625.0
70°	603.9	641.1	775.7	1041.2	1086.7	1143.1	2811.9	7290.6	10078.8	11290.5	10882.1
72.5°	447.5	473.1	563.5	807.8	879.6	771.9	1391.8	5298.7	8660.7	10212.2	9884.6
75°	323.8	343.0	409.7	618.0	703.9	587.9	694.3	3096.5	6041.1	7183.6	7241.3
77.5°	247.5	262.2	305.8	452.6	563.5	441.1	430.8	1424.5	2864.5	2878.6	3040.1
80°	198.7	208.4	232.1	318.6	432.1	330.2	280.8	575.1	905.2	766.1	803.9
82.5°	146.2	162.2	196.2	223.7	309.0	227.6	171.2	290.4	344.3	296.2	298.8
85°	83.3	94.2	118.6	160.3	197.5	139.1	98.1	128.9	160.3	131.4	117.3
87.5°	29.5	38.5	41.7	62.8	85.9	57.7	37.8	37.2	52.6	39.1	32.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P882897
 CATALOG NUMBER: NAV-SB3A-727-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4	1771.4
2.5°	1784.2	1781.0	1768.2	1750.9	1732.9	1715.6	1709.8	1697.6	1689.3	1684.8	1690.0
5°	1820.1	1809.8	1779.7	1741.2	1700.9	1657.3	1626.5	1598.3	1577.8	1558.5	1566.2
7.5°	1871.4	1853.4	1801.5	1734.2	1662.4	1589.9	1536.1	1495.1	1467.5	1449.5	1453.4
10°	1931.0	1903.4	1823.9	1723.3	1612.4	1508.5	1445.0	1409.8	1392.5	1382.9	1385.4
12.5°	1999.6	1960.5	1847.0	1698.3	1536.1	1417.5	1373.9	1363.6	1364.3	1364.9	1366.2
15°	2084.2	2029.7	1865.6	1643.8	1436.7	1347.6	1339.9	1356.6	1373.9	1382.2	1381.6
17.5°	2179.8	2102.8	1868.8	1554.0	1339.3	1302.7	1327.1	1363.0	1389.3	1400.8	1403.4
20°	2282.3	2177.2	1845.7	1427.1	1259.1	1266.2	1309.8	1355.9	1384.8	1399.5	1403.4
22.5°	2399.7	2256.7	1790.6	1293.7	1193.7	1226.4	1277.7	1322.6	1352.7	1367.5	1371.3
25°	2533.6	2345.8	1704.1	1181.6	1137.3	1181.6	1232.8	1270.0	1294.4	1307.9	1311.7
27.5°	2682.4	2438.8	1588.7	1092.4	1088.0	1135.4	1177.7	1206.6	1219.4	1229.6	1233.5
30°	2831.8	2523.4	1448.9	1025.1	1045.0	1089.9	1120.0	1132.8	1136.7	1138.6	1143.1
32.5°	2993.3	2596.5	1302.1	969.4	1004.0	1045.6	1063.6	1069.4	1051.4	1039.2	1043.1
35°	3188.9	2674.7	1158.5	925.1	963.6	999.5	1005.3	1000.1	979.0	954.0	955.2
37.5°	3430.6	2772.1	1043.7	893.7	925.8	949.5	942.4	941.1	943.1	913.6	915.5
40°	3726.7	2899.1	959.7	869.3	895.0	900.1	880.2	891.1	900.8	855.9	857.2
42.5°	4055.6	3052.3	906.5	852.7	869.3	857.2	826.4	838.6	837.3	778.3	777.7
45°	4390.9	3219.0	887.9	840.5	845.6	821.3	787.3	790.5	763.6	710.3	712.3
47.5°	4724.3	3397.9	899.5	830.2	816.1	788.6	762.3	748.2	708.4	668.7	668.7
50°	5051.3	3585.7	941.8	809.7	775.7	759.7	740.5	715.5	673.2	639.2	636.6
52.5°	5354.5	3774.8	989.2	775.7	725.1	734.7	722.5	693.7	652.0	617.4	618.0
55°	5641.7	3964.0	1007.8	728.9	677.6	712.9	705.9	652.6	602.6	574.4	571.9
57.5°	5954.6	4191.5	987.3	669.3	639.2	687.9	661.0	602.0	573.1	552.0	550.1
60°	6388.0	4548.6	943.1	595.6	602.6	650.7	604.6	580.2	548.8	525.1	523.8
62.5°	7107.9	5214.7	871.9	522.5	559.7	595.6	577.6	553.3	521.2	498.1	498.1
65°	8172.2	6140.5	737.9	465.4	511.6	541.7	548.8	524.4	491.1	466.7	468.0
67.5°	9069.7	6721.3	558.4	418.0	462.2	498.1	518.0	494.3	459.0	435.3	436.0
70°	9020.3	6299.5	426.3	371.2	418.6	455.2	480.8	462.2	424.4	402.0	403.9
72.5°	8011.9	5269.9	344.9	323.8	374.4	410.3	441.1	427.0	388.5	366.7	366.7
75°	5886.0	3740.8	275.7	275.7	319.3	363.5	397.5	388.5	353.2	337.9	333.4
77.5°	2481.1	1569.4	216.1	228.9	265.4	312.2	354.5	357.7	327.0	346.2	314.1
80°	659.7	432.7	164.8	180.2	208.4	257.7	308.4	307.1	273.8	255.8	237.8
82.5°	251.3	170.5	117.3	126.9	150.7	197.5	244.3	252.0	218.6	189.1	189.1
85°	96.8	73.1	72.4	76.3	87.8	130.8	184.6	191.0	164.8	139.8	144.2
87.5°	25.0	21.8	26.9	25.6	40.4	69.9	105.8	109.6	100.7	58.3	83.3
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)