

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: P966061

Luminaire Tested: **NAV-SB4B-722-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966061
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-722-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14986.6 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

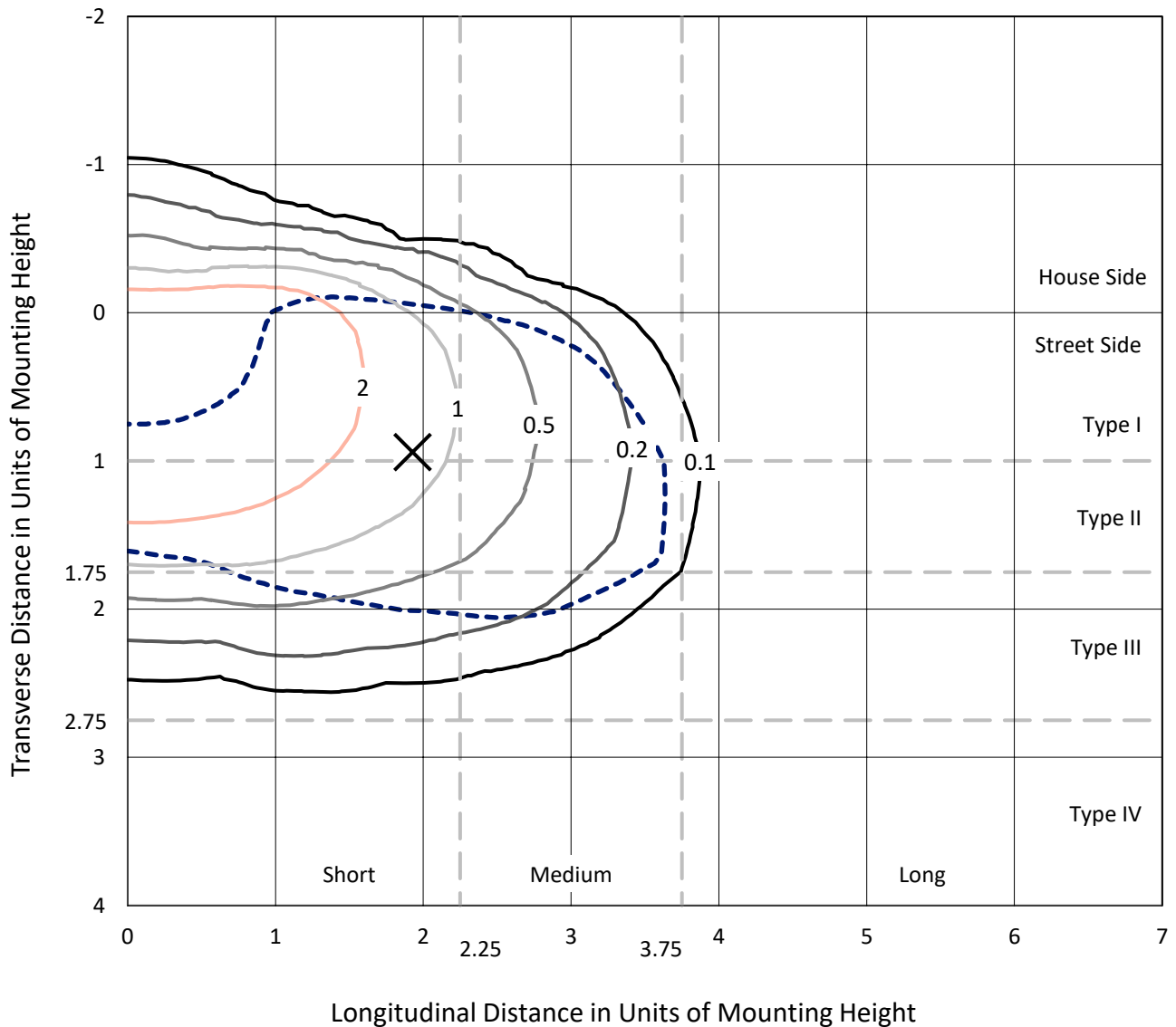
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P966061
 CATALOG NUMBER: NAV-SB4B-722-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

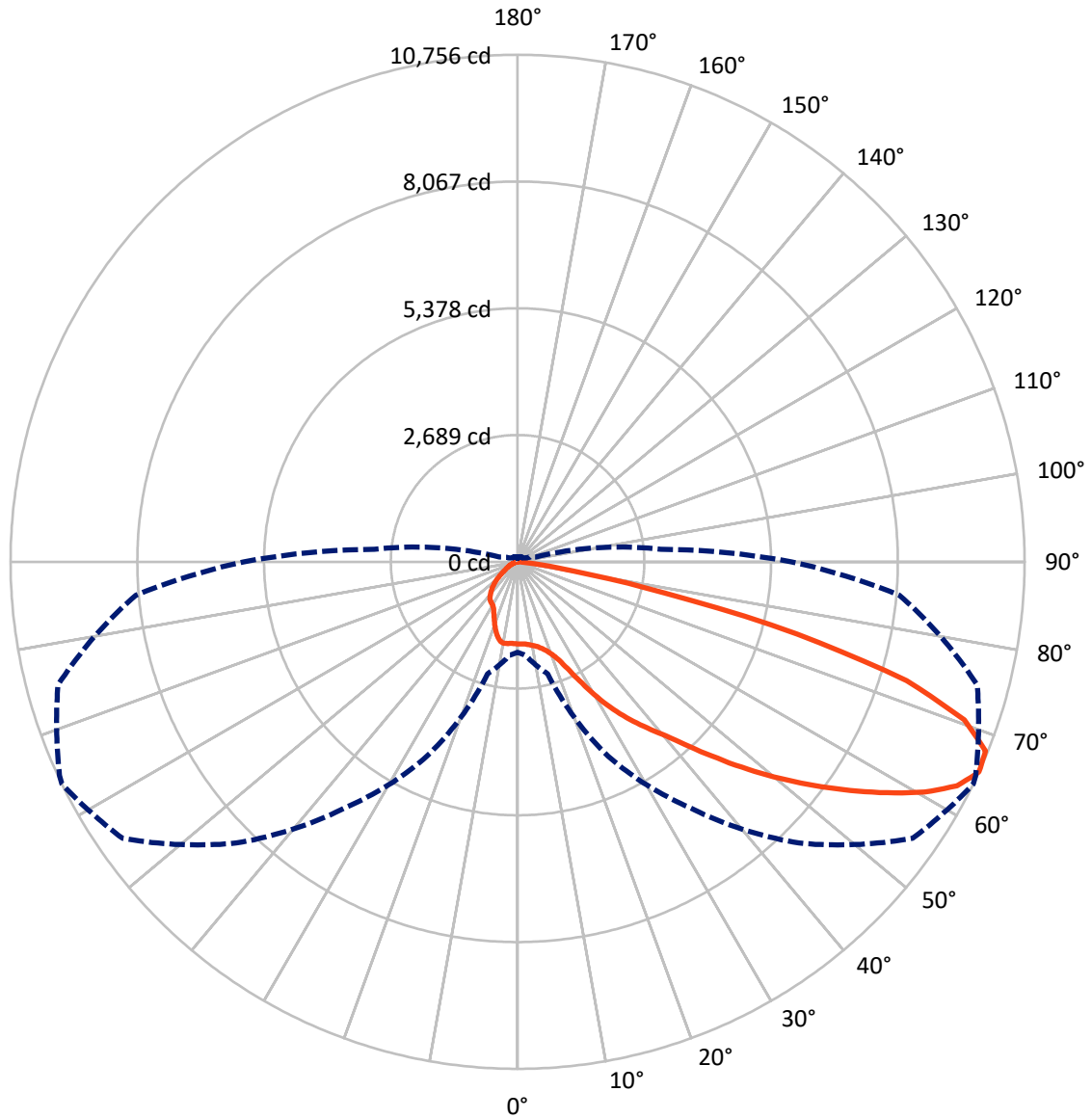
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type III - Short - N/A

REPORT NUMBER: P966061
CATALOG NUMBER: NAV-SB4B-722-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P966061
 CATALOG NUMBER: NAV-SB4B-722-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2004.2	0.0	2004.2
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	12982.4	0.0	12982.4
	% Fixture	86.6	0.0	86.6
Total	Lumens	14986.6	0.0	14986.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.8	1.1
10°-20°	436.2	2.9
20°-30°	826.5	5.5
30°-40°	1672.5	11.2
40°-50°	2849.1	19.0
50°-60°	3874.6	25.9
60°-70°	3638.4	24.3
70°-80°	1457.7	9.7
80°-90°	70.6	0.5
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°	14986.6	100.0
0°-180°	14986.6	100.0

Coefficient of Utilization



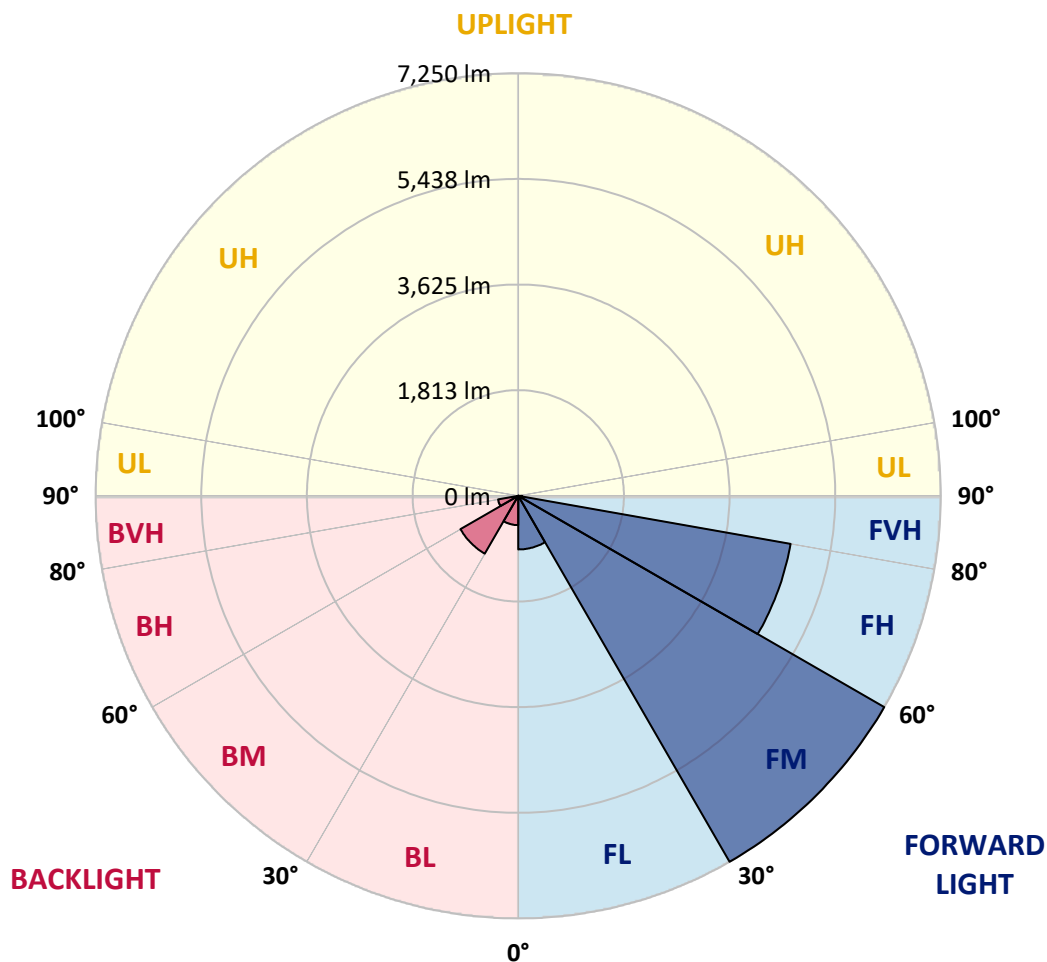
REPORT NUMBER: P966061
 CATALOG NUMBER: NAV-SB4B-722-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	920.3	6.1			
FM (30°-60°)	7250.5	48.4			
FH (60°-80°)	4744.4	31.7			G2/5000
FVH (80°-90°)	67.2	0.4			G1/100
BL (0°-30°)	503.2	3.4	B2/1000		
BM (30°-60°)	1145.8	7.6	B2/2500		
BH (60°-80°)	351.8	2.3	B1/500		G1/500
BVH (80°-90°)	3.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



REPORT NUMBER: P966061
 CATALOG NUMBER: NAV-SB4B-722-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1
2.5°	1737.1	1749.2	1746.1	1743.1	1742.1	1744.1	1745.1	1744.1	1744.1	1744.1	1745.1
5°	1703.9	1713.9	1713.9	1721.0	1731.0	1743.1	1752.1	1754.2	1756.1	1759.2	1758.2
7.5°	1640.6	1648.6	1654.7	1677.8	1702.9	1735.0	1762.2	1776.2	1778.3	1789.3	1793.3
10°	1597.5	1607.5	1617.6	1641.6	1677.8	1726.0	1772.2	1806.4	1811.4	1837.5	1849.6
12.5°	1595.4	1605.5	1618.5	1644.6	1686.8	1738.1	1794.4	1843.6	1852.6	1890.8	1915.9
15°	1616.5	1628.5	1640.6	1672.8	1718.0	1780.2	1840.5	1901.8	1910.9	1965.1	1992.3
17.5°	1659.7	1675.8	1684.8	1717.0	1765.2	1834.5	1913.9	1984.2	1992.3	2055.5	2089.7
20°	1745.1	1764.2	1767.2	1793.3	1840.5	1914.9	2009.3	2096.7	2106.8	2179.1	2217.3
22.5°	1921.9	1949.0	1925.0	1938.0	1980.2	2054.5	2157.0	2267.5	2281.5	2364.0	2398.1
25°	2233.4	2271.5	2209.3	2187.1	2205.2	2282.6	2411.2	2550.8	2566.9	2633.2	2650.3
27.5°	2845.2	2796.0	2701.5	2609.1	2554.8	2599.1	2743.7	2916.5	2936.6	3000.9	2980.8
30°	3517.3	3474.1	3346.5	3141.6	3013.0	3005.9	3139.6	3332.5	3355.5	3416.8	3355.5
32.5°	4190.4	4149.3	4010.6	3758.5	3535.4	3424.9	3517.3	3731.3	3743.4	3782.6	3692.2
35°	4852.6	4810.3	4671.6	4413.4	4139.3	3888.0	3870.0	4111.1	4115.1	4156.3	4021.7
37.5°	5518.6	5483.4	5335.7	5082.6	4812.4	4465.7	4297.9	4470.7	4475.8	4515.9	4376.3
40°	5993.8	6008.9	5907.4	5711.5	5479.4	5100.7	4778.1	4853.5	4823.3	4890.7	4807.4
42.5°	6401.7	6431.9	6343.4	6245.0	6110.3	5776.8	5372.9	5359.8	5311.7	5347.8	5261.4
45°	6754.3	6779.5	6700.1	6677.0	6674.0	6439.9	6022.9	5944.6	5877.2	5870.3	5766.8
47.5°	6883.9	6932.2	6966.3	7043.7	7194.4	7096.0	6695.1	6573.5	6498.2	6442.9	6279.2
50°	6933.2	6984.5	7101.0	7326.0	7682.7	7724.8	7364.2	7227.6	7135.1	7034.7	6793.5
52.5°	6866.9	6958.3	7115.0	7493.8	8011.2	8229.2	8006.2	7886.6	7781.1	7617.4	7259.7
55°	6476.1	6567.5	6888.0	7491.7	8174.9	8582.8	8613.0	8559.7	8441.2	8183.0	7636.5
57.5°	5652.3	5787.9	6295.2	7236.6	8171.9	8887.3	9207.7	9245.9	9113.3	8743.6	7932.8
60°	4510.9	4694.8	5313.7	6670.9	7919.8	9052.0	9729.2	9920.1	9779.4	9296.1	8172.9
62.5°	3147.6	3360.6	3946.4	5784.8	7343.1	8933.5	10109.9	10462.6	10356.1	9790.4	8265.4
65°	1919.9	1988.2	2460.4	4552.1	6362.5	8437.2	10227.4	10755.9	10720.8	10092.9	8128.8
67.5°	1278.9	1336.2	1471.8	3121.5	4939.0	7445.6	9946.2	10704.7	10714.7	10043.6	7628.4
70°	770.6	819.8	908.3	1815.4	3200.9	5893.3	9075.1	10051.7	10109.9	9385.5	6680.0
72.5°	317.4	350.7	431.0	822.8	1657.7	3740.3	7226.6	8630.1	8765.7	7891.6	5126.7
75°	179.8	196.9	253.2	412.9	719.3	1743.1	4377.3	6126.4	6326.4	5439.3	3084.3
77.5°	119.5	127.6	163.8	267.2	404.9	594.8	1870.7	3191.8	3573.6	2970.8	1335.2
80°	80.4	87.4	112.5	178.9	263.2	255.2	595.7	1182.4	1454.8	1020.7	325.5
82.5°	54.2	55.2	80.4	117.6	166.8	123.6	175.8	367.7	462.2	295.4	123.6
85°	31.2	30.1	59.2	68.4	74.3	51.2	53.2	110.5	144.6	124.5	70.3
87.5°	4.0	6.0	23.1	18.0	10.0	11.1	11.1	19.1	28.1	30.1	15.1
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: P966061
 CATALOG NUMBER: NAV-SB4B-722-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1	1743.1
2.5°	1745.1	1744.1	1741.1	1738.1	1731.0	1727.0	1729.1	1727.0	1726.0	1727.0	1731.0
5°	1758.2	1755.1	1747.1	1737.1	1723.0	1705.9	1694.8	1678.7	1663.7	1654.7	1656.7
7.5°	1793.3	1790.3	1779.3	1751.1	1705.9	1634.6	1569.3	1512.0	1468.8	1443.7	1444.7
10°	1849.6	1844.6	1827.5	1765.2	1646.7	1491.0	1361.3	1253.8	1183.5	1150.4	1147.3
12.5°	1915.9	1909.9	1879.7	1752.1	1534.1	1291.0	1112.1	992.6	927.3	898.2	895.1
15°	1994.2	1986.2	1926.9	1689.8	1370.3	1070.0	906.2	816.8	774.6	748.5	749.5
17.5°	2091.7	2077.7	1962.1	1596.4	1192.5	901.2	779.6	712.3	675.2	650.1	648.0
20°	2218.3	2195.1	1990.2	1484.9	1028.8	794.7	694.2	638.0	609.9	587.7	583.7
22.5°	2395.1	2362.0	2024.4	1364.4	913.3	721.4	630.9	589.8	566.6	541.5	537.5
25°	2614.2	2574.9	2066.6	1252.9	833.8	658.0	584.8	550.5	523.5	494.3	491.3
27.5°	2920.5	2850.2	2116.8	1161.4	765.6	603.8	542.5	504.3	473.2	449.1	444.0
30°	3262.2	3146.6	2161.0	1106.2	703.3	553.6	487.3	449.1	419.9	402.8	399.9
32.5°	3585.7	3428.9	2190.1	1082.0	647.0	496.3	427.0	385.8	363.7	358.6	361.7
35°	3891.1	3684.1	2187.1	1058.9	596.8	439.0	367.7	325.5	308.4	311.4	311.4
37.5°	4242.7	3956.4	2166.0	1022.7	555.6	386.8	316.4	279.3	264.2	265.3	269.3
40°	4651.6	4270.9	2153.0	954.5	510.3	338.6	274.3	244.2	233.1	229.1	228.1
42.5°	5087.6	4575.2	2155.0	877.1	454.1	295.4	245.2	220.1	210.0	206.9	205.9
45°	5525.7	4865.6	2158.0	796.7	394.8	262.2	224.1	203.0	196.9	192.9	192.9
47.5°	5937.5	5112.7	2101.8	710.3	336.6	237.1	206.9	192.9	187.9	182.9	182.9
50°	6321.4	5277.5	1966.2	609.9	290.4	217.0	193.9	183.9	178.9	173.8	173.8
52.5°	6619.8	5303.7	1742.1	506.4	258.2	201.9	185.8	176.8	170.8	165.7	164.7
55°	6752.3	5139.9	1423.6	409.9	233.1	188.9	177.8	168.8	161.7	156.7	155.7
57.5°	6718.2	4795.3	1110.2	329.5	209.0	175.8	167.8	161.7	153.8	145.7	144.6
60°	6550.4	4334.1	836.9	274.3	186.9	161.7	156.7	151.7	140.6	128.6	126.6
62.5°	6260.1	3754.5	596.8	227.0	162.8	145.7	143.7	139.6	123.6	101.5	99.4
65°	5816.0	3050.2	401.9	188.9	139.6	127.6	128.6	121.6	100.4	75.3	73.4
67.5°	5167.0	2230.4	257.2	154.7	116.5	106.5	107.5	103.5	85.4	64.3	61.3
70°	4340.2	1476.8	167.8	117.6	93.5	82.4	88.5	89.4	72.4	52.3	50.2
72.5°	3181.8	872.1	117.6	87.4	68.4	57.3	72.4	74.3	58.2	39.2	37.2
75°	1813.4	413.9	88.5	63.2	42.2	40.2	56.3	56.3	40.2	26.1	24.1
77.5°	761.6	172.8	62.3	41.2	24.1	23.1	38.1	35.2	20.1	12.1	12.1
80°	220.1	77.4	33.1	20.1	10.0	9.0	15.1	11.1	5.0	2.0	2.0
82.5°	86.4	34.1	13.0	8.0	4.0	4.0	2.0	0.0	0.0	0.0	0.0
85°	51.2	14.0	6.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)