

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: P966067

Luminaire Tested: **NAV-SB4B-722-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966067
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-722-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14720 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

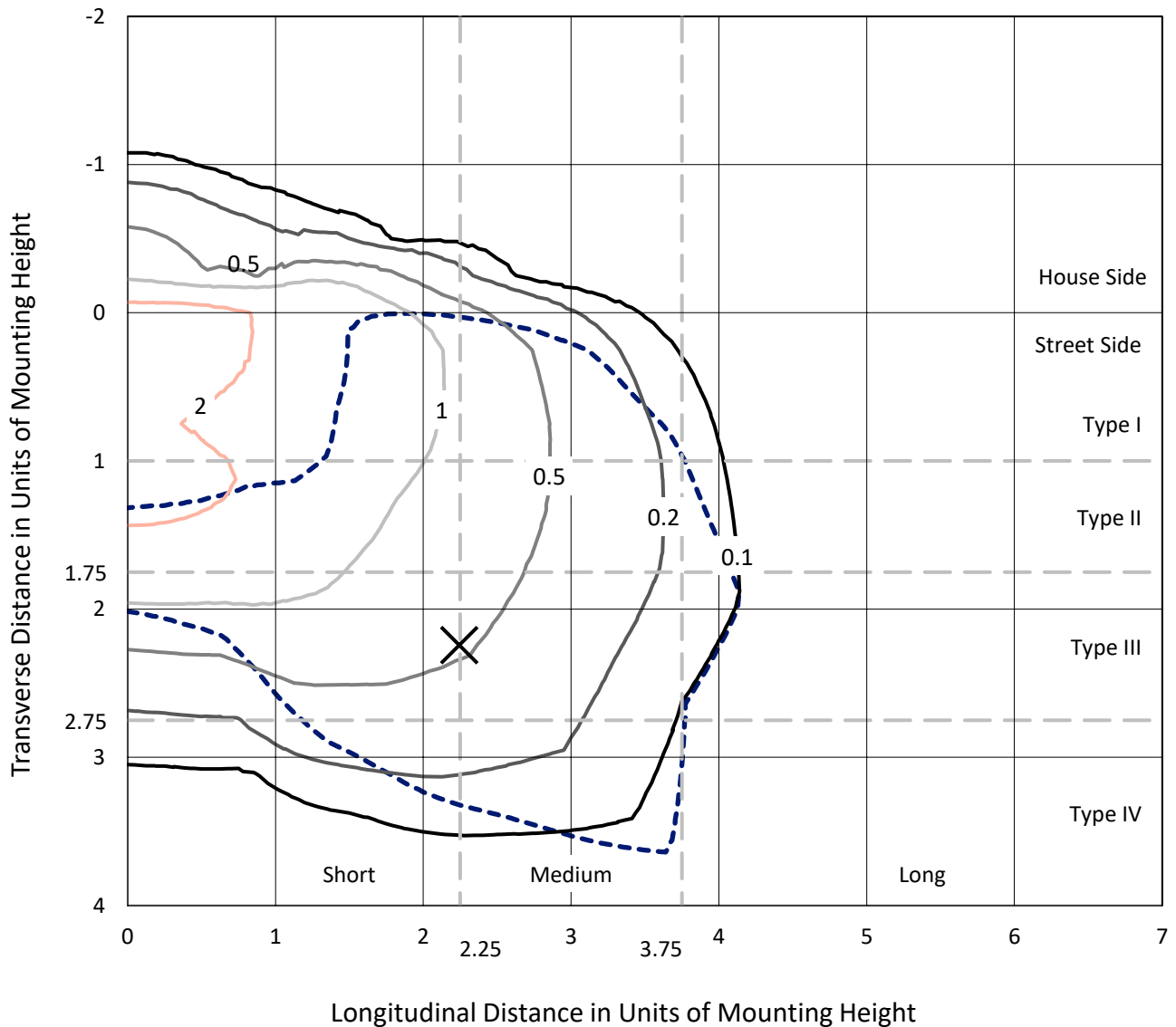
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

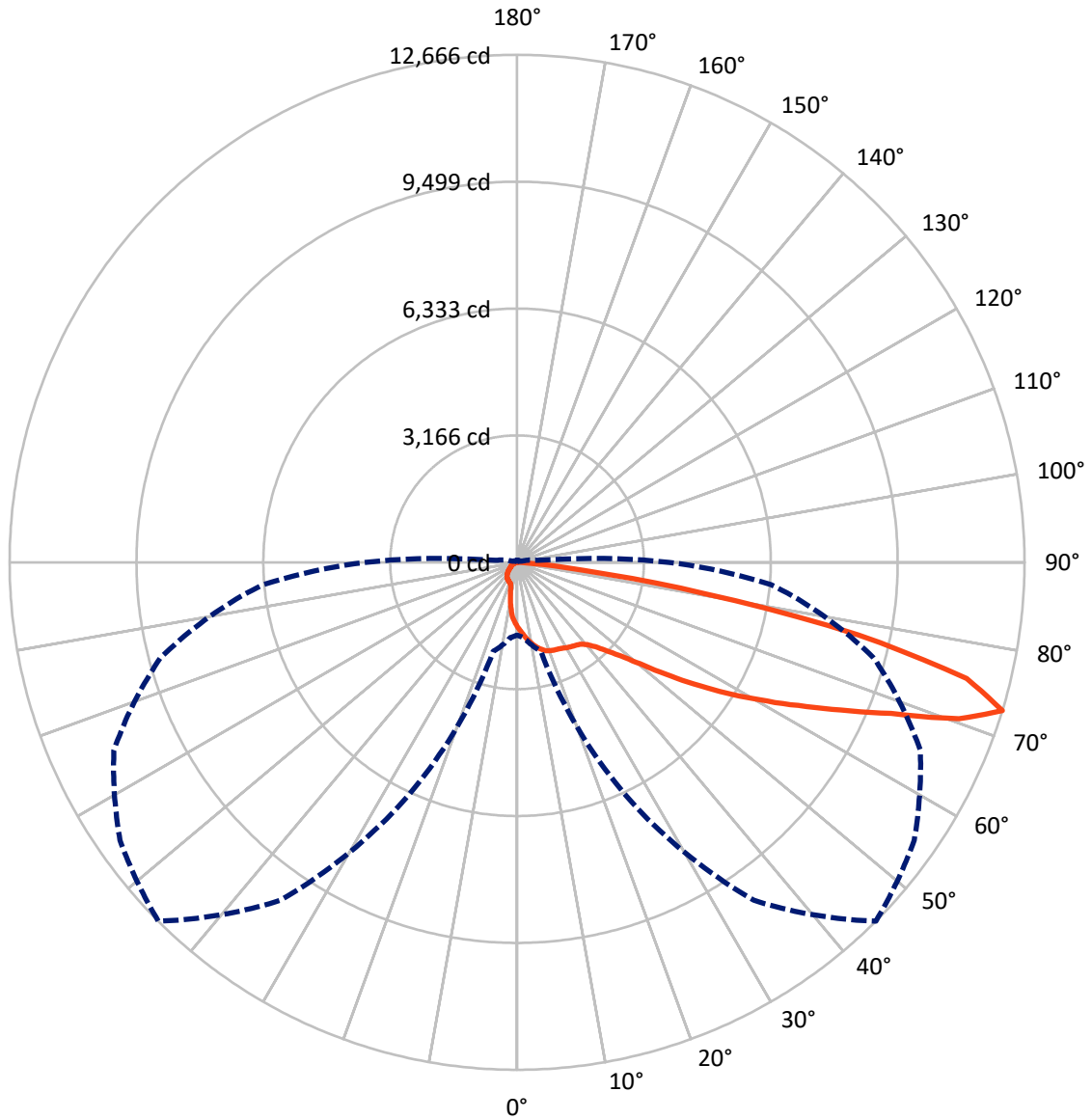
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1546.7	0.0	1546.7
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	13173.4	0.0	13173.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	14720.0	0.0	14720.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	1.0
10°-20°	444.1	3.0
20°-30°	729.2	5.0
30°-40°	1034.2	7.0
40°-50°	1709.4	11.6
50°-60°	3070.8	20.9
60°-70°	4263.9	29.0
70°-80°	3092.9	21.0
80°-90°	223.6	1.5
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°	14720.0	100.0
0°-180°	14720.0	100.0

Coefficient of Utilization



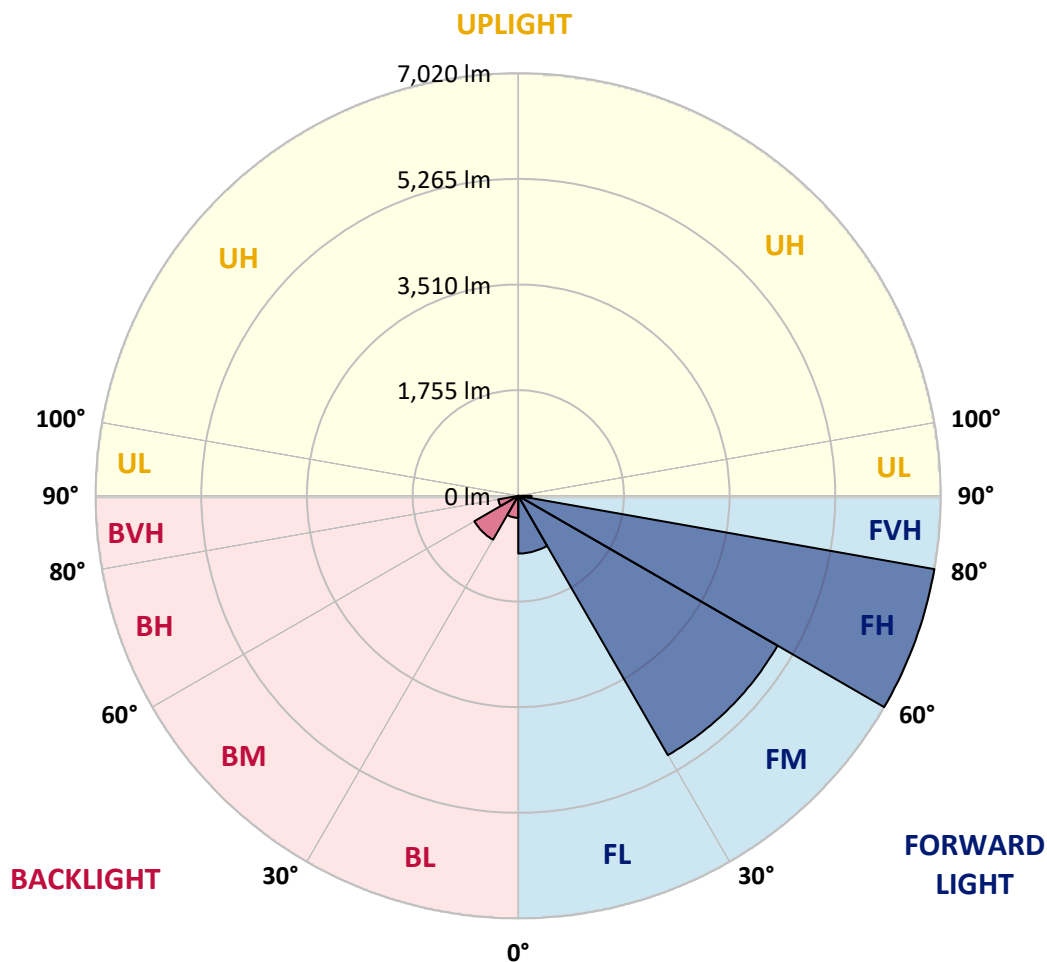
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	958.9	6.5			
FM (30°-60°)	4973.2	33.8			
FH (60°-80°)	7019.6	47.7			G3/7500
FVH (80°-90°)	221.7	1.5			G2/225
BL (0°-30°)	366.3	2.5	B1/500		
BM (30°-60°)	841.2	5.7	B1/1000		
BH (60°-80°)	337.3	2.3	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6
2.5°	1761.4	1764.3	1762.3	1750.3	1730.2	1719.1	1713.1	1693.0	1680.0	1656.8	1632.7
5°	1923.1	1935.1	1928.1	1903.9	1865.8	1838.6	1830.6	1789.4	1752.2	1709.1	1658.9
7.5°	2094.9	2100.9	2087.8	2056.7	2005.5	1959.3	1952.2	1894.9	1835.7	1769.4	1701.0
10°	2243.6	2250.6	2230.5	2185.3	2127.1	2069.8	2059.7	1996.4	1926.1	1844.7	1757.3
12.5°	2368.2	2375.2	2349.1	2294.9	2230.5	2171.3	2161.2	2094.9	2017.5	1927.1	1818.6
15°	2462.7	2475.7	2440.5	2382.2	2312.9	2253.7	2248.6	2183.4	2107.9	2007.5	1891.9
17.5°	2517.9	2530.9	2497.8	2427.4	2368.2	2317.9	2311.9	2257.7	2187.4	2090.9	1963.3
20°	2526.9	2539.0	2503.8	2442.6	2393.3	2353.1	2350.1	2310.9	2259.6	2167.3	2040.7
22.5°	2499.8	2514.8	2482.8	2433.5	2399.3	2378.2	2374.2	2352.1	2323.0	2244.5	2112.9
25°	2471.7	2483.7	2459.6	2416.4	2398.3	2396.3	2399.3	2395.3	2389.3	2323.0	2197.4
27.5°	2469.6	2482.8	2455.6	2414.4	2404.3	2425.5	2428.4	2447.6	2452.6	2394.3	2278.8
30°	2486.8	2495.8	2469.6	2426.5	2421.5	2469.6	2470.7	2504.8	2512.9	2454.6	2359.1
32.5°	2524.0	2534.0	2507.9	2444.5	2437.6	2504.8	2507.9	2553.1	2566.1	2518.9	2443.5
35°	2611.3	2623.4	2593.2	2494.7	2469.6	2538.0	2547.0	2600.2	2626.4	2587.2	2530.9
37.5°	2829.3	2794.1	2752.9	2596.2	2543.0	2590.2	2605.3	2667.6	2713.8	2668.6	2635.5
40°	3370.9	3260.4	3131.8	2769.0	2671.6	2701.8	2713.8	2776.1	2839.4	2795.2	2779.1
42.5°	4183.7	4053.2	3846.1	3166.9	2865.5	2880.6	2889.7	2943.9	3033.3	2998.1	3002.1
45°	4908.2	4861.0	4649.9	3846.1	3228.2	3153.9	3164.9	3193.1	3324.7	3311.7	3337.7
47.5°	5464.8	5437.6	5274.9	4625.8	3841.1	3488.5	3519.6	3532.7	3722.6	3768.8	3839.1
50°	5892.8	5882.8	5737.0	5319.1	4641.9	3981.8	3992.9	3964.7	4249.0	4363.6	4497.2
52.5°	6296.7	6330.9	6223.4	5963.1	5497.0	4627.9	4625.8	4493.2	4877.1	5049.9	5277.9
55°	6661.5	6673.5	6684.5	6620.3	6357.0	5363.3	5344.2	5127.2	5605.4	5784.3	6031.5
57.5°	7004.0	7009.1	7107.6	7239.2	7252.2	6153.1	6117.9	5857.7	6401.2	6528.8	6680.5
60°	7234.1	7257.2	7465.3	7831.0	7990.7	6967.8	6948.8	6683.5	7211.1	7270.3	7242.1
62.5°	6902.6	7043.3	7567.7	8293.2	8688.0	7871.2	7862.1	7612.9	8063.1	8014.8	7773.7
65°	5587.4	5825.5	6747.9	8605.6	9372.2	8879.9	8893.0	8627.7	8938.2	8781.5	8205.7
67.5°	3908.4	4159.7	5250.8	8630.7	10136.8	10064.5	10139.8	9723.9	9867.6	9515.9	8308.2
70°	2702.7	2832.4	3542.7	8090.2	10732.7	11696.2	11694.2	11070.2	10791.9	9850.5	7785.7
72.5°	1817.5	1884.9	2300.8	6418.2	10294.6	12665.7	12607.5	12099.1	11103.4	9212.5	6361.0
75°	766.6	815.9	1065.0	3607.0	8144.4	11587.7	11430.0	10692.5	9865.5	7254.2	3968.7
77.5°	243.1	264.2	419.9	1291.1	4486.2	8710.1	8543.3	6677.5	6612.2	3639.2	1450.9
80°	115.5	134.7	236.2	518.4	1765.4	4737.3	4714.3	3029.3	2844.4	982.7	291.4
82.5°	50.2	59.2	130.6	277.3	789.8	1690.0	1724.2	1030.8	853.0	372.8	89.4
85°	16.1	21.1	60.3	127.6	333.5	419.9	414.9	245.2	343.6	203.0	31.2
87.5°	0.0	0.0	20.1	29.1	34.1	24.1	27.2	21.1	95.4	56.3	11.1
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°	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6	1612.6
2.5°	1620.6	1604.5	1576.4	1550.3	1527.2	1504.1	1490.0	1470.0	1467.9	1467.9	1472.9
5°	1631.7	1605.6	1555.3	1502.1	1440.8	1382.5	1324.3	1268.0	1249.9	1236.9	1242.9
7.5°	1663.9	1622.7	1543.2	1441.8	1325.2	1197.6	1108.2	1011.8	974.6	954.5	957.6
10°	1710.1	1653.8	1533.2	1355.4	1166.6	992.7	865.1	760.6	720.4	703.4	703.4
12.5°	1761.4	1692.0	1515.2	1247.9	992.7	784.7	660.1	611.9	605.9	605.9	605.9
15°	1822.6	1738.2	1484.0	1121.2	810.9	620.9	576.8	578.7	584.8	588.8	588.8
17.5°	1885.9	1787.4	1434.8	979.6	650.1	558.6	559.6	562.6	567.6	571.7	571.7
20°	1954.3	1836.7	1369.5	828.9	557.6	540.6	543.6	546.5	550.6	552.6	553.6
22.5°	2027.6	1882.9	1292.1	681.2	526.4	525.5	526.4	529.5	534.5	534.5	536.5
25°	2106.0	1934.2	1203.7	573.7	510.4	510.4	512.4	514.4	518.4	518.4	519.5
27.5°	2186.3	1981.3	1110.3	517.4	496.3	495.4	495.4	498.4	500.4	501.3	502.4
30°	2274.8	2036.6	1016.8	505.4	485.3	480.3	477.2	479.3	481.2	482.3	484.3
32.5°	2365.2	2089.9	933.4	510.4	474.3	465.1	455.1	453.2	453.2	457.2	460.1
35°	2465.6	2148.1	869.1	527.5	468.2	443.1	427.0	418.0	419.0	425.0	428.0
37.5°	2586.2	2218.5	821.8	542.5	464.2	418.0	391.9	380.8	373.7	380.8	378.7
40°	2743.9	2321.9	787.7	554.6	459.2	388.9	353.6	335.6	322.6	326.6	324.5
42.5°	2976.1	2484.7	774.7	555.7	448.1	354.6	314.5	290.4	271.3	272.2	268.2
45°	3301.6	2742.0	841.9	542.5	424.0	317.5	273.3	241.2	229.1	226.1	222.0
47.5°	3747.7	3116.7	997.7	515.5	388.9	281.4	233.1	205.9	196.9	191.9	188.9
50°	4345.5	3598.0	1170.6	485.3	353.6	247.1	200.0	182.9	176.8	171.8	170.8
52.5°	5038.8	4086.3	1312.2	455.1	318.5	217.0	178.9	168.8	163.8	159.8	158.8
55°	5674.8	4422.9	1304.1	423.0	284.3	192.9	163.8	157.7	151.7	147.7	145.7
57.5°	6070.7	4470.1	1075.1	387.9	245.2	173.8	149.8	145.7	138.7	133.7	132.6
60°	6252.5	4200.9	753.6	341.6	205.9	155.7	134.7	132.6	123.6	116.5	114.5
62.5°	6285.7	3700.5	502.4	284.3	171.8	138.7	119.5	116.5	104.4	92.5	86.4
65°	6151.0	2985.1	347.7	222.0	146.7	120.5	102.5	96.5	83.4	71.3	67.3
67.5°	5725.0	2095.9	242.1	159.8	124.5	95.4	81.4	79.3	69.3	59.2	56.3
70°	4944.3	1194.6	161.7	119.5	98.5	65.3	64.3	66.3	56.3	48.3	44.2
72.5°	3790.9	546.5	100.4	87.4	67.3	44.2	51.2	52.3	43.3	36.2	32.2
75°	2231.5	234.1	63.3	56.3	34.1	29.1	37.2	38.1	29.1	23.1	20.1
77.5°	759.6	88.5	40.2	33.1	17.1	16.1	24.1	24.1	16.1	9.0	7.1
80°	172.8	33.1	20.1	13.0	8.0	7.1	8.0	7.1	4.0	1.0	0.0
82.5°	49.2	13.0	8.0	5.0	3.0	3.0	1.0	0.0	0.0	0.0	0.0
85°	14.0	6.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.0	1.0	0.0	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)