

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: P885000

Luminaire Tested: **NAV-SB6A-827-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885000
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6A-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16750 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

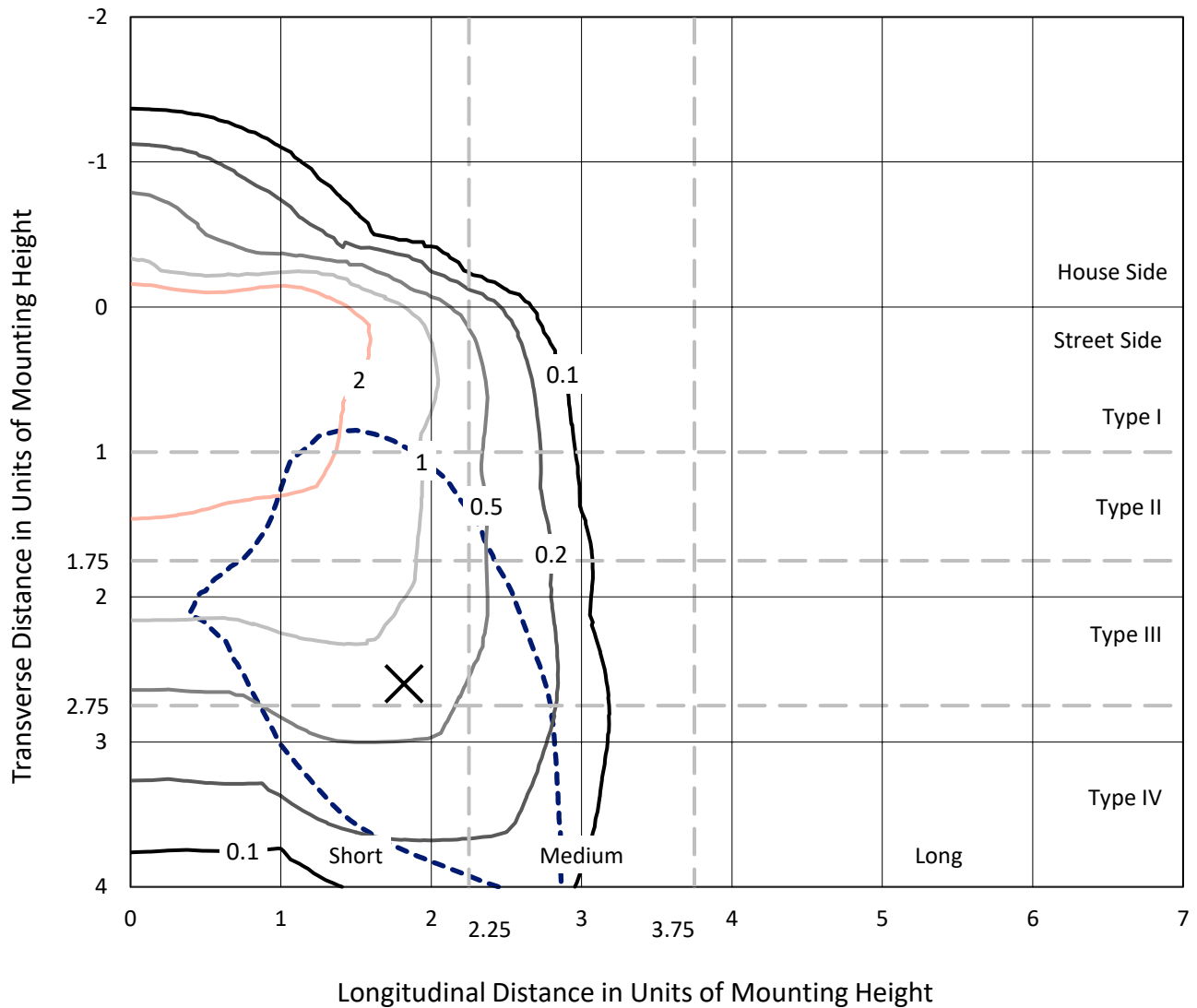
Input Watts (W): 170.9
Input Voltage (V): 120.0
Input Current (Ain): 1.434
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

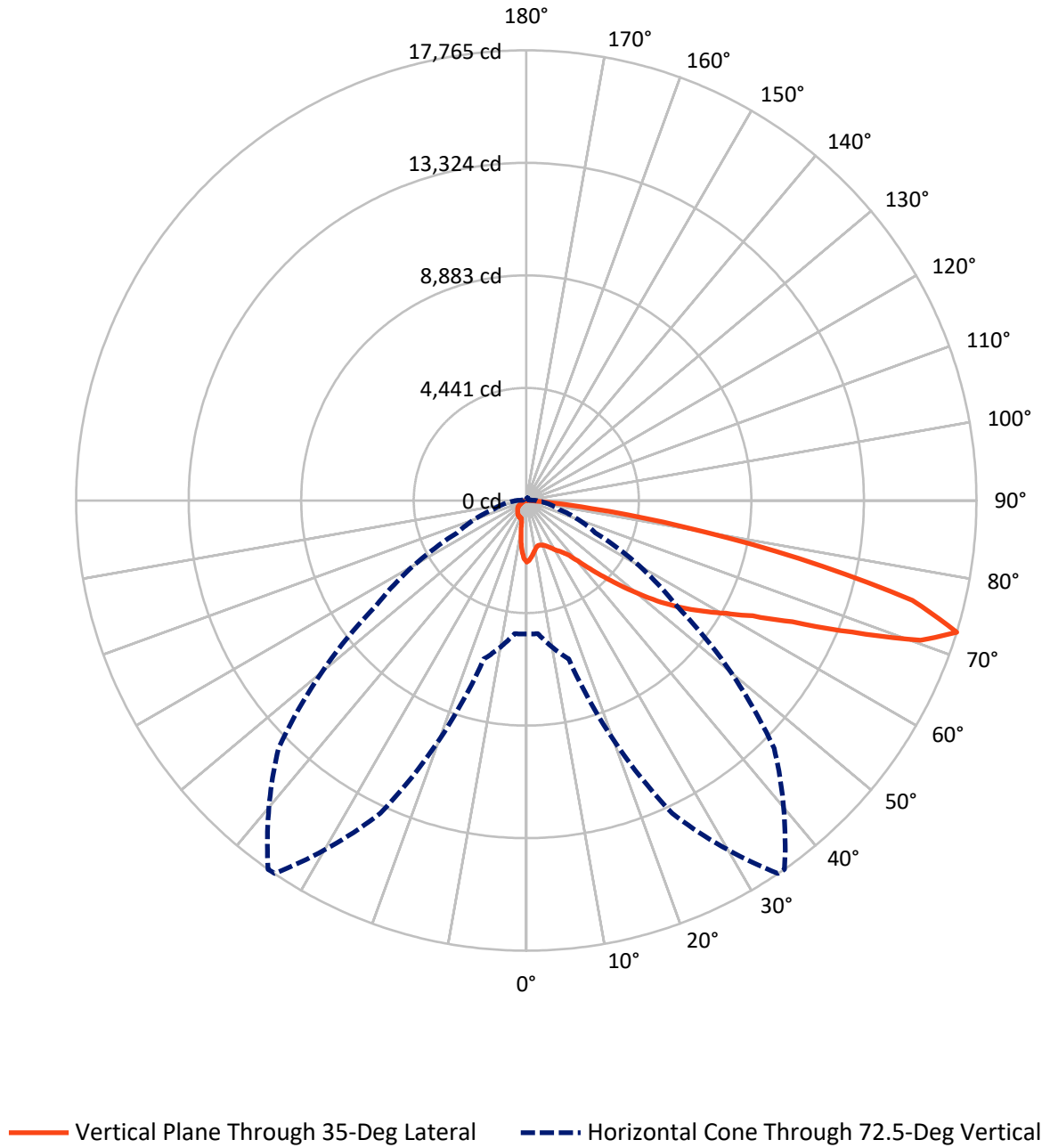
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1885.1	0.0	1885.1
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	14864.9	0.0	14864.9
	% Fixture	88.7	0.0	88.7
Total	Lumens	16750.0	0.0	16750.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.5	1.2
10°-20°	466.7	2.8
20°-30°	758.1	4.5
30°-40°	1264.9	7.6
40°-50°	2393.2	14.3
50°-60°	3802.8	22.7
60°-70°	4704.3	28.1
70°-80°	2924.2	17.5
80°-90°	236.3	1.4
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°	16750.0	100.0
0°-180°	16750.0	100.0

Coefficient of Utilization



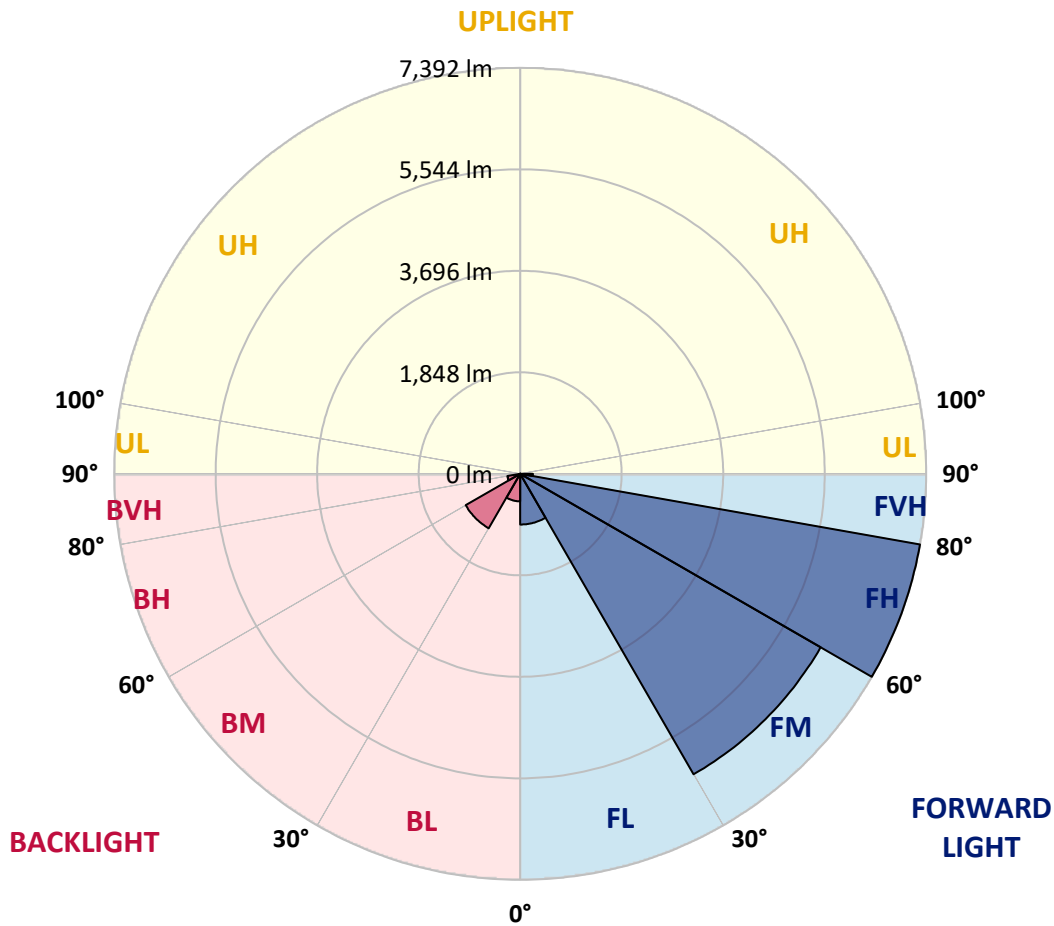
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	923.4	5.5			
FM (30°-60°)	6316.4	37.7			
FH (60°-80°)	7392.0	44.1			G3/7500
FVH (80°-90°)	233.1	1.4			G3/500
BL (0°-30°)	500.9	3.0	B2/1000		
BM (30°-60°)	1144.4	6.8	B2/2500		
BH (60°-80°)	236.6	1.4	B1/500		G1/500
BVH (80°-90°)	3.2	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-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6
2.5°	2319.6	2339.3	2343.0	2349.1	2349.1	2356.5	2368.7	2385.9	2414.1	2428.9	2438.7
5°	2138.0	2152.7	2171.1	2185.9	2214.1	2217.8	2265.6	2312.3	2377.3	2426.4	2460.8
7.5°	1955.1	1972.3	1996.8	2032.4	2069.3	2080.3	2152.7	2231.3	2334.4	2426.4	2484.1
10°	1826.3	1827.5	1849.6	1885.2	1944.1	1957.6	2045.9	2157.6	2286.5	2411.7	2506.2
12.5°	1753.8	1762.4	1772.2	1799.2	1855.7	1864.3	1958.8	2090.1	2238.6	2403.1	2532.0
15°	1753.8	1760.0	1766.1	1779.6	1825.0	1832.4	1915.8	2047.2	2214.1	2406.8	2573.7
17.5°	1772.2	1782.1	1777.2	1793.1	1841.0	1845.9	1919.5	2034.9	2212.9	2430.1	2637.5
20°	1816.4	1823.8	1814.0	1823.8	1871.7	1881.5	1957.6	2058.2	2233.7	2470.6	2717.3
22.5°	1886.4	1890.1	1866.8	1874.1	1923.2	1935.5	2023.8	2124.5	2284.0	2535.6	2824.1
25°	1974.8	1982.1	1946.5	1955.1	2001.8	2016.5	2118.4	2223.9	2363.8	2625.2	2960.3
27.5°	2076.6	2080.3	2049.6	2048.4	2108.5	2129.4	2232.5	2346.6	2470.6	2738.1	3132.1
30°	2193.2	2204.3	2174.8	2169.9	2246.0	2263.2	2365.0	2497.6	2627.7	2907.5	3376.4
32.5°	2285.3	2293.9	2276.7	2288.9	2366.3	2379.8	2525.8	2711.1	2874.4	3148.1	3709.0
35°	2417.8	2422.7	2383.5	2405.5	2493.9	2528.3	2745.5	3010.6	3184.9	3450.0	4143.4
37.5°	2897.7	2897.7	2730.8	2621.6	2706.2	2736.9	3046.2	3387.4	3567.8	3855.0	4690.8
40°	3561.7	3550.6	3306.4	3083.0	3072.0	3132.1	3474.5	3862.4	4062.4	4341.0	5306.9
42.5°	4269.8	4252.7	3920.1	3699.1	3662.3	3683.2	3969.1	4447.8	4651.5	4933.8	5969.7
45°	4898.2	4893.3	4588.9	4291.9	4225.7	4291.9	4586.5	5132.6	5278.7	5575.7	6631.2
47.5°	5424.7	5424.7	5202.6	5008.7	4974.3	5013.6	5422.3	5892.4	5878.9	6259.3	7275.5
50°	6031.0	6026.1	5815.0	5731.6	5767.2	5822.4	6384.5	6692.6	6499.9	6930.7	7851.2
52.5°	6455.7	6485.2	6412.7	6399.2	6580.9	6676.6	7361.5	7475.6	7055.9	7567.6	8281.9
55°	6792.0	6826.3	6909.8	7004.3	7354.1	7479.3	8307.7	8218.1	7521.0	8119.9	8529.9
57.5°	7268.2	7219.1	7348.0	7534.5	8100.3	8251.3	9224.5	8918.9	7895.3	8567.9	8556.9
60°	7846.2	7853.6	7875.7	8111.3	8845.3	9039.2	10127.8	9581.7	8135.9	8842.8	8257.4
62.5°	8540.9	8552.0	8597.4	8959.4	9845.6	10028.4	11090.1	10124.2	8246.4	8765.5	7484.2
65°	8493.0	8539.7	9046.6	10284.9	11366.2	11546.6	12213.0	10504.6	8079.4	8058.6	6093.6
67.5°	7737.0	7813.1	8661.2	11868.2	13658.8	13860.1	13570.5	10579.5	7359.0	6266.7	3975.3
70°	6745.3	6772.3	7792.2	13291.9	16313.5	16517.3	14785.5	9756.0	5584.3	3495.4	1780.8
72.5°	5267.7	5273.8	6470.4	13622.0	17754.4	17765.4	13831.9	7242.4	3003.2	1342.7	618.6
75°	3763.0	3726.1	4333.7	11047.1	15620.1	15745.3	10369.6	3397.2	1147.5	634.5	308.1
77.5°	2017.7	2058.2	2452.2	6551.4	10790.6	11004.1	5657.9	979.4	584.2	432.0	203.7
80°	623.5	657.8	1005.2	2999.6	6112.0	6240.9	2097.5	435.7	407.5	308.1	133.8
82.5°	196.4	203.7	468.8	1260.5	2536.9	2595.8	607.5	246.7	278.6	203.7	78.5
85°	56.5	57.7	208.6	470.1	627.2	639.4	170.6	95.7	159.6	126.4	40.5
87.5°	6.1	19.6	78.5	78.5	55.2	54.0	18.4	20.9	45.4	16.0	7.4
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°	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6	2427.6
2.5°	2432.5	2433.8	2417.8	2390.8	2361.4	2336.8	2306.1	2281.6	2264.4	2259.5	2268.1
5°	2449.7	2441.1	2395.7	2313.5	2215.3	2130.6	2036.1	1961.3	1912.2	1891.3	1898.7
7.5°	2475.5	2451.0	2351.5	2189.5	2001.8	1834.8	1665.5	1534.1	1450.7	1409.0	1415.1
10°	2497.6	2448.5	2277.9	2010.3	1723.2	1470.3	1242.0	1083.7	995.4	953.6	954.9
12.5°	2518.5	2447.3	2182.2	1798.0	1409.0	1099.7	887.4	808.8	784.3	775.7	773.2
15°	2557.7	2451.0	2061.9	1555.0	1096.0	830.9	753.6	752.3	757.3	754.8	753.6
17.5°	2611.7	2454.6	1925.7	1297.3	845.6	732.7	729.0	740.1	747.4	743.8	742.5
20°	2681.7	2469.4	1780.8	1042.0	726.6	708.2	716.8	726.6	732.7	726.6	725.3
22.5°	2779.9	2495.1	1622.5	837.0	688.5	693.4	700.8	711.8	718.0	709.4	708.2
25°	2900.2	2535.6	1466.6	727.8	670.1	676.3	687.3	699.6	706.9	698.3	697.1
27.5°	3056.0	2600.7	1323.0	703.3	651.7	655.4	671.3	689.8	699.6	688.5	688.5
30°	3281.9	2707.5	1199.1	714.3	640.7	632.1	654.2	679.9	691.0	681.2	679.9
32.5°	3581.3	2858.4	1123.0	731.5	635.8	605.1	625.9	659.1	677.5	671.3	671.3
35°	3974.1	3087.9	1093.5	751.1	632.1	576.8	591.6	627.2	659.1	665.2	665.2
37.5°	4450.3	3407.0	1102.1	759.7	621.0	553.5	560.9	591.6	633.3	652.9	657.8
40°	4991.5	3778.9	1151.2	751.1	608.8	533.9	535.1	558.4	595.2	624.7	634.5
42.5°	5549.9	4213.4	1242.0	719.2	597.7	516.7	513.0	529.0	553.5	574.4	583.0
45°	6081.4	4660.1	1331.6	675.0	584.2	499.5	490.9	497.1	502.0	510.6	515.5
47.5°	6545.3	4974.3	1305.9	634.5	565.8	479.9	465.2	462.7	448.0	446.7	445.5
50°	6865.6	5043.1	1159.8	594.0	538.8	457.8	434.5	419.7	394.0	381.7	382.9
52.5°	6967.5	4771.8	947.5	553.5	494.6	428.3	395.2	371.9	340.0	328.9	327.7
55°	6832.5	4240.4	757.3	504.4	433.2	389.1	352.2	321.6	295.8	282.3	282.3
57.5°	6502.3	3564.1	598.9	446.7	368.2	344.9	308.1	277.4	255.3	241.8	239.3
60°	5955.0	2830.2	473.7	378.0	314.2	297.0	259.0	239.3	219.7	203.7	200.1
62.5°	5124.1	2020.2	371.9	299.5	262.6	243.0	220.9	206.2	182.9	160.8	157.1
65°	3998.6	1235.9	287.2	219.7	211.1	201.3	187.8	174.3	146.1	124.0	120.3
67.5°	2522.1	585.4	205.0	165.7	166.9	162.0	155.9	144.8	124.0	104.3	101.9
70°	1110.7	283.5	135.0	126.4	124.0	124.0	128.9	125.2	105.5	87.1	83.5
72.5°	378.0	152.2	100.6	95.7	89.6	88.4	108.0	104.3	84.7	67.5	63.8
75°	197.6	101.9	73.6	68.7	54.0	65.0	85.9	81.0	60.1	44.2	40.5
77.5°	128.9	72.4	50.3	44.2	30.7	43.0	63.8	56.5	35.6	22.1	19.6
80°	81.0	47.9	29.5	20.9	14.7	23.3	34.4	24.5	13.5	4.9	3.7
82.5°	43.0	24.5	11.0	7.4	6.1	7.4	8.6	6.1	2.5	0.0	0.0
85°	17.2	8.6	3.7	2.5	1.2	0.0	2.5	1.2	0.0	0.0	0.0
87.5°	6.1	1.2	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)