

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: P964570

Luminaire Tested: **NAV-SB3C-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3C-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17602.3 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 149.1
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

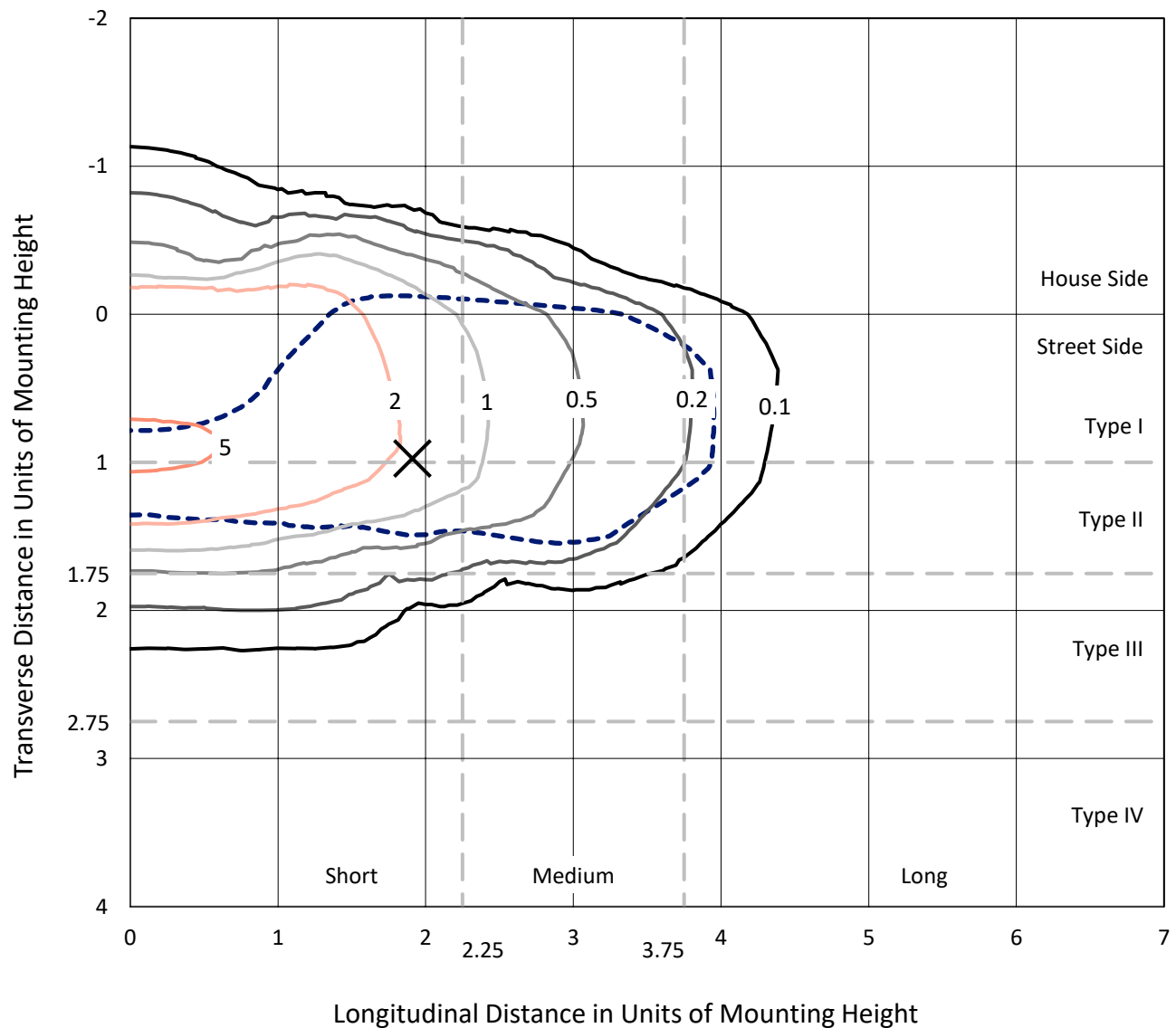


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Iso-Footcandle Lines of Horizontal Illumination

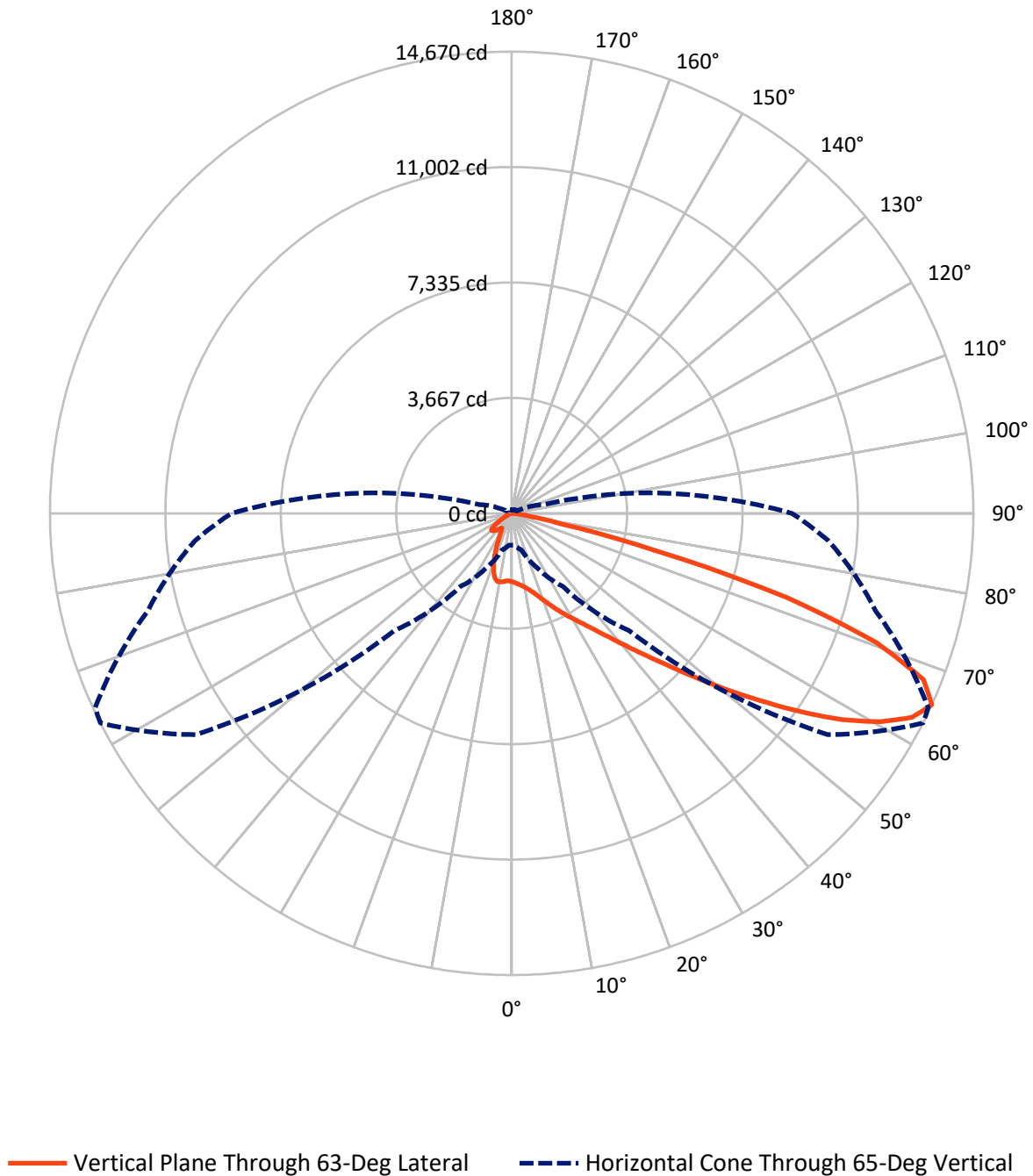
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2587.4	0.0	2587.4
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	15014.9	0.0	15014.9
	% Fixture	85.3	0.0	85.3
Total	Lumens	17602.3	0.0	17602.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.7	1.2
10°-20°	567.9	3.2
20°-30°	988.9	5.6
30°-40°	1782.4	10.1
40°-50°	3535.1	20.1
50°-60°	4815.4	27.4
60°-70°	3843.6	21.8
70°-80°	1739.3	9.9
80°-90°	125.0	0.7
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°	17602.3	100.0
0°-180°	17602.3	100.0

Coefficient of Utilization



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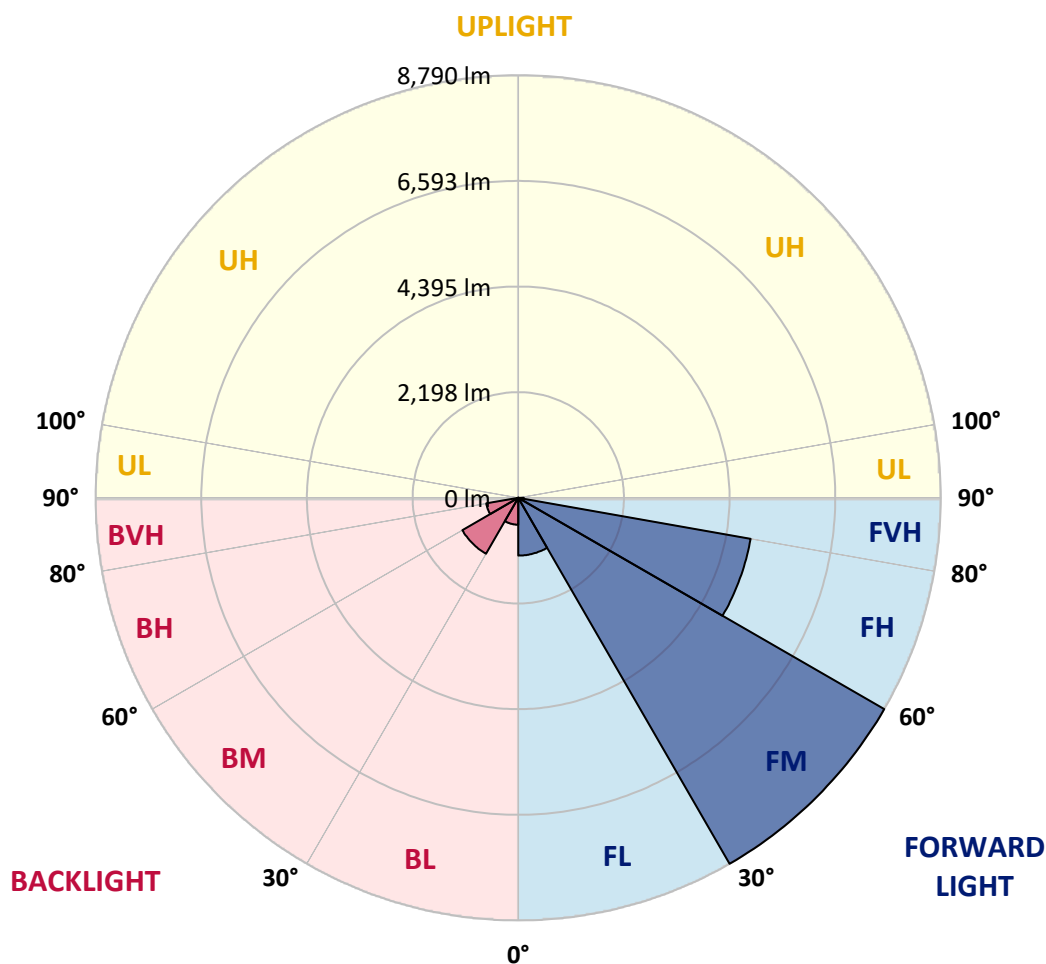
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1201.6	6.8			
FM	(30°-60°)	8790.2	49.9			
FH	(60°-80°)	4907.4	27.9			G2/5000
FVH	(80°-90°)	115.7	0.7			G2/225
BL	(0°-30°)	560.0	3.2	B2/1000		
BM	(30°-60°)	1342.7	7.6	B2/2500		
BH	(60°-80°)	675.5	3.8	B2/1000		G2/1000
BVH	(80°-90°)	9.3	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5
2.5°	2223.3	2217.3	2225.8	2222.1	2219.6	2214.8	2212.5	2210.0	2205.2	2201.5	2186.9
5°	2229.4	2225.8	2234.2	2241.5	2248.7	2256.0	2259.6	2264.5	2259.6	2250.0	2235.4
7.5°	2178.5	2176.1	2194.2	2216.0	2248.7	2276.6	2306.9	2323.9	2325.0	2321.4	2305.6
10°	2174.8	2168.8	2186.9	2213.6	2256.0	2305.6	2358.9	2395.3	2400.1	2415.8	2398.9
12.5°	2231.8	2225.8	2251.2	2280.2	2323.9	2376.0	2441.2	2492.2	2499.5	2521.2	2509.1
15°	2327.5	2319.0	2348.1	2385.6	2441.2	2500.6	2569.7	2615.7	2621.7	2648.4	2626.6
17.5°	2438.9	2430.4	2464.3	2504.3	2564.9	2645.9	2725.9	2776.7	2784.0	2800.9	2760.9
20°	2581.8	2570.9	2597.6	2633.8	2698.0	2794.9	2890.6	2963.2	2962.0	2962.0	2896.6
22.5°	2747.6	2730.7	2753.8	2782.8	2843.4	2960.8	3087.9	3173.9	3173.9	3140.0	3032.3
25°	2925.7	2908.7	2934.2	2960.8	3014.1	3147.3	3296.2	3402.8	3407.6	3349.5	3177.6
27.5°	3148.5	3126.7	3146.0	3177.6	3209.1	3344.7	3521.5	3645.0	3647.4	3557.8	3315.6
30°	3577.1	3515.4	3454.9	3420.9	3435.5	3569.9	3758.8	3895.6	3907.8	3784.2	3465.7
32.5°	4361.9	4349.8	4136.6	3858.1	3712.8	3812.1	4024.0	4188.7	4195.9	4037.4	3660.7
35°	5581.3	5566.8	5224.1	4693.7	4220.2	4136.6	4346.1	4541.1	4536.2	4357.1	3913.9
37.5°	7036.8	7023.6	6571.9	5862.3	5095.7	4627.1	4761.5	4966.1	4996.5	4761.5	4240.7
40°	8280.6	8230.9	7945.1	7260.9	6258.2	5440.8	5352.4	5488.1	5519.5	5241.0	4656.2
42.5°	9222.6	9180.3	9035.0	8607.5	7665.4	6644.6	6048.7	6100.8	6136.0	5801.7	5133.3
45°	9710.6	9701.0	9759.1	9719.2	9099.1	8121.9	7044.1	6827.4	6840.7	6423.0	5674.5
47.5°	9779.7	9774.8	10040.1	10415.4	10331.9	9788.1	8321.7	7733.2	7686.0	7124.1	6263.1
50°	9372.8	9363.2	9871.8	10575.3	11155.4	11188.1	9772.5	8754.0	8649.9	7849.4	6877.0
52.5°	8073.4	8071.1	8906.6	10077.6	11444.7	12413.6	11206.2	9875.4	9701.0	8617.2	7526.1
55°	6212.2	6257.0	7214.9	8599.0	10916.8	13003.3	12493.4	11120.2	10852.6	9389.8	8124.4
57.5°	4400.6	4466.0	5413.0	6645.7	9279.5	12654.5	13364.2	12367.5	12079.3	10159.9	8731.1
60°	2363.8	2421.9	3370.1	4841.4	6903.7	11353.9	13823.0	13450.2	13177.6	10891.3	9278.4
62.5°	1408.4	1427.7	1820.1	3125.5	4669.5	8674.1	13628.1	14274.8	14050.7	11505.3	9754.3
65°	1011.2	1014.7	1212.2	1908.4	2834.8	5270.1	12260.9	14669.6	14600.5	11967.9	10106.7
67.5°	851.3	848.9	931.2	1267.8	1931.5	2639.9	9397.0	14111.3	14404.3	12260.9	10306.5
70°	730.2	733.8	830.8	928.9	1451.9	1494.3	4671.8	12286.4	12911.2	12338.4	10294.4
72.5°	543.8	555.9	645.4	846.4	1095.9	1028.1	1613.0	9110.0	10239.9	11625.2	9760.4
75°	383.9	389.9	454.1	712.1	817.4	748.4	823.5	4709.5	6157.7	8912.7	7988.6
77.5°	295.5	306.4	343.9	497.7	805.2	525.5	503.8	1630.0	2504.3	5383.9	5477.2
80°	159.8	179.3	248.3	359.7	565.5	371.8	249.5	649.0	848.9	2517.6	2111.9
82.5°	82.3	92.0	173.1	259.1	322.2	324.5	123.5	270.1	349.9	777.5	289.5
85°	32.7	40.0	116.2	142.9	165.9	159.8	55.7	109.0	126.0	215.6	88.4
87.5°	7.3	12.1	42.3	32.7	31.5	33.9	13.3	25.4	24.2	25.4	15.8
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°	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5	2172.5
2.5°	2185.8	2180.9	2167.6	2153.1	2136.1	2126.5	2120.4	2119.2	2110.7	2104.6	2110.7
5°	2222.1	2217.3	2191.9	2161.5	2128.8	2103.4	2079.2	2057.4	2025.9	2019.9	2017.5
7.5°	2294.8	2281.4	2240.2	2199.1	2137.3	2063.4	1973.8	1870.9	1778.9	1751.0	1737.7
10°	2384.4	2366.2	2314.1	2241.5	2104.6	1903.6	1686.8	1485.8	1326.0	1281.1	1264.2
12.5°	2486.1	2470.4	2401.4	2266.9	1967.8	1603.3	1271.5	1022.0	867.0	828.3	817.4
15°	2607.2	2584.2	2488.5	2228.1	1723.2	1218.2	873.1	725.4	669.6	662.4	655.1
17.5°	2735.5	2698.0	2566.0	2089.0	1393.8	865.8	674.6	632.1	607.9	600.6	597.0
20°	2853.0	2804.6	2612.0	1878.2	1041.4	674.6	604.2	576.5	554.6	546.1	541.3
22.5°	2970.4	2901.5	2612.0	1591.2	781.0	598.2	554.6	529.2	503.8	492.8	486.8
25°	3092.8	3000.8	2566.0	1271.5	628.5	548.6	507.4	479.5	457.8	444.4	439.6
27.5°	3211.4	3084.3	2460.7	968.7	559.4	505.0	463.8	437.2	416.6	406.9	406.9
30°	3324.1	3166.6	2312.9	735.0	514.7	462.6	423.8	400.9	380.3	370.5	371.8
32.5°	3476.7	3270.8	2155.5	603.0	475.9	422.6	387.6	365.7	347.6	340.3	340.3
35°	3688.6	3424.6	2019.9	592.1	443.2	389.9	354.9	334.3	316.1	310.0	310.0
37.5°	3988.9	3672.9	1948.4	664.8	416.6	360.9	328.2	306.4	289.5	284.5	283.4
40°	4359.4	4009.5	1987.2	737.5	398.4	335.5	303.9	282.2	267.6	261.6	260.3
42.5°	4799.0	4424.8	2201.5	793.1	386.3	313.6	281.0	256.8	247.0	244.6	244.6
45°	5304.0	4881.4	2529.7	852.5	367.0	293.0	257.9	239.7	232.5	231.3	230.1
47.5°	5878.0	5382.7	2910.0	926.4	347.6	273.7	239.7	227.7	221.6	219.1	219.1
50°	6447.1	5887.7	3301.1	967.6	331.8	255.5	225.2	215.6	210.7	209.5	209.5
52.5°	7043.0	6407.2	3617.1	928.9	318.5	241.0	213.1	205.8	201.0	199.8	199.8
55°	7610.8	6827.4	3671.7	788.3	291.8	226.4	199.8	196.2	190.1	190.1	188.9
57.5°	8100.1	7038.1	3286.6	578.8	265.2	204.7	186.4	182.9	178.0	176.8	175.6
60°	8549.3	6977.6	2537.0	389.9	236.2	182.9	169.5	167.1	162.3	156.2	155.0
62.5°	8802.5	6711.1	1735.3	254.3	207.0	159.8	150.2	148.9	138.1	126.0	123.5
65°	8898.1	6163.7	1082.6	185.3	173.1	136.8	129.6	127.1	111.4	98.1	96.9
67.5°	8814.6	5262.9	546.1	146.6	136.8	113.9	106.6	106.6	95.6	83.5	82.3
70°	8480.3	3945.3	230.1	117.5	105.4	87.2	87.2	92.0	81.2	67.9	66.6
72.5°	7754.9	2654.4	122.3	89.6	78.7	61.8	71.4	75.0	64.2	50.8	50.8
75°	6165.0	1619.1	84.8	66.6	49.6	43.6	54.5	56.9	43.6	33.9	32.7
77.5°	4216.5	930.0	56.9	42.3	31.5	25.4	37.5	35.2	23.0	15.8	16.9
80°	1851.6	387.6	32.7	19.4	12.1	9.7	13.3	9.7	7.3	4.8	4.8
82.5°	216.8	90.8	12.1	7.3	4.8	2.5	1.2	0.0	0.0	0.0	0.0
85°	44.8	10.9	6.0	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	2.5	1.2	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)