

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: P965255

Luminaire Tested: **NAV-SB3D-830-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965255
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-SB3D-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA 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: 22053.9 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 218.1
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

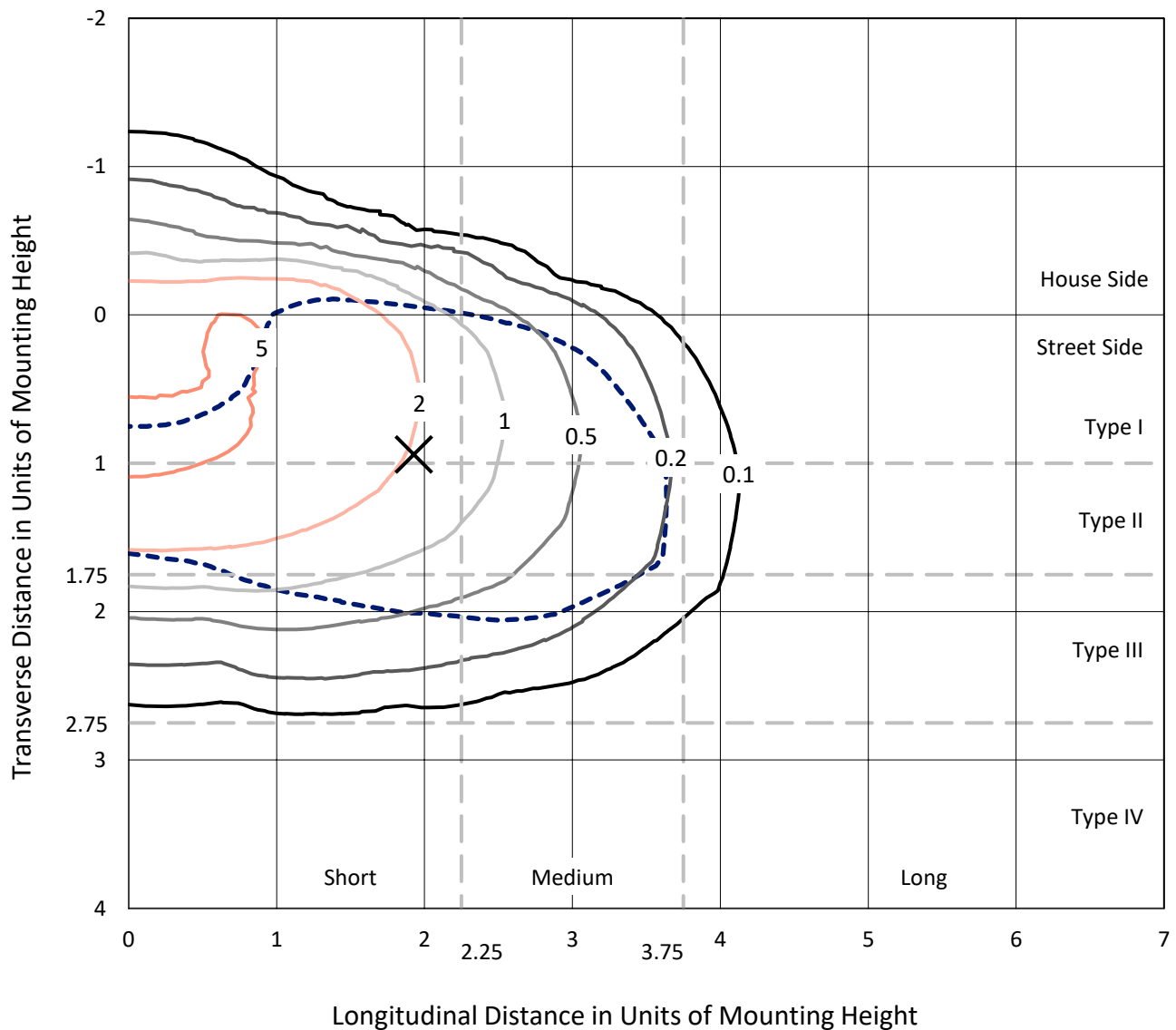


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

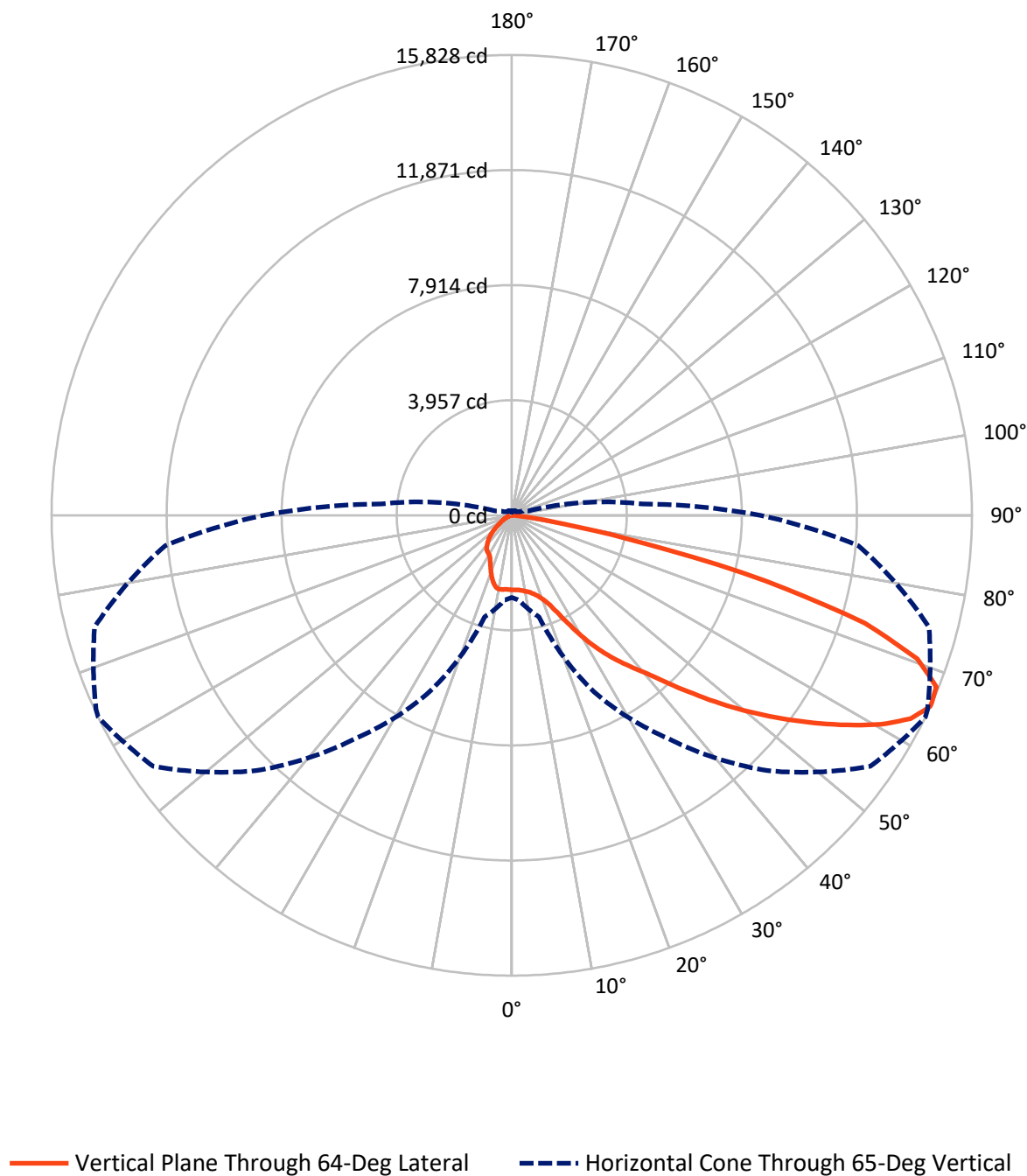


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2949.3	0.0	2949.3
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	19104.6	0.0	19104.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	22053.9	0.0	22053.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.7	1.1
10°-20°	641.9	2.9
20°-30°	1216.3	5.5
30°-40°	2461.2	11.2
40°-50°	4192.7	19.0
50°-60°	5701.8	25.9
60°-70°	5354.3	24.3
70°-80°	2145.1	9.7
80°-90°	103.9	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°	22053.9	100.0
0°-180°	22053.9	100.0

Coefficient of Utilization



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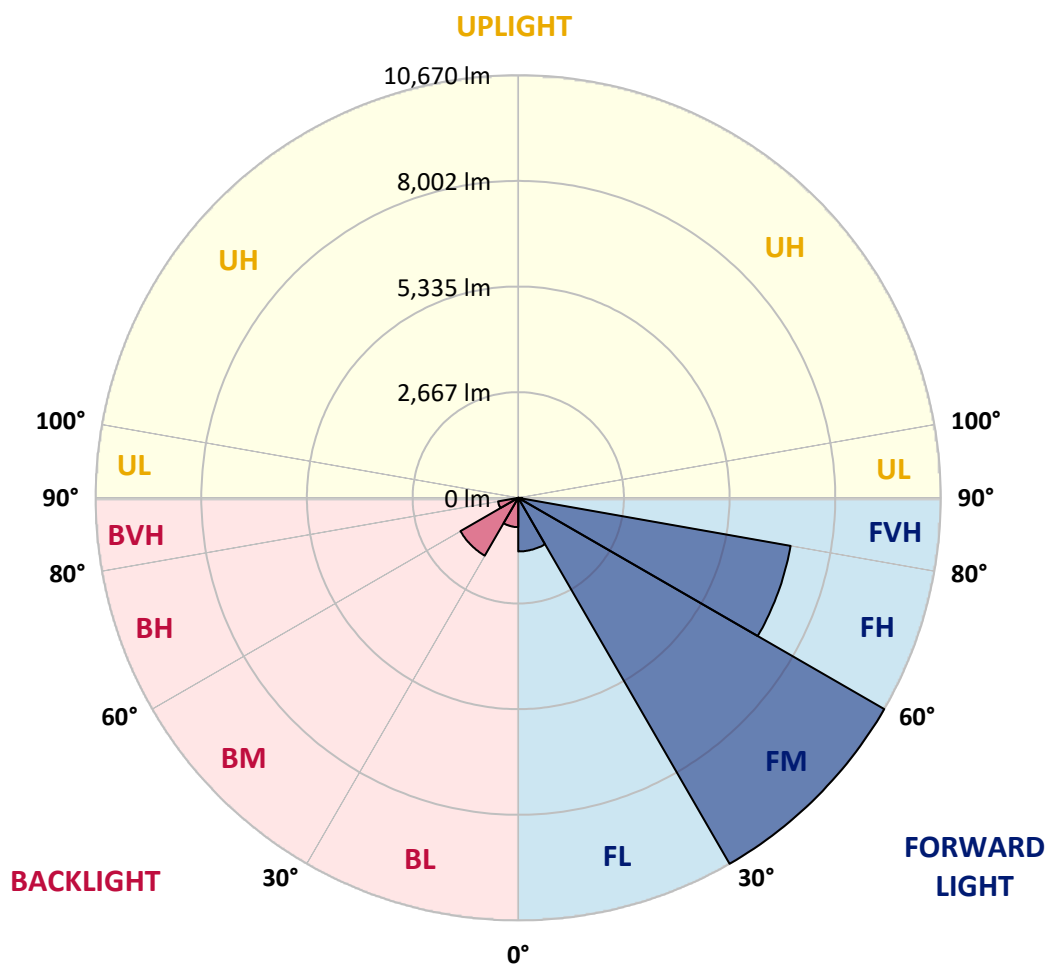
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1354.4	6.1			
FM	(30°-60°)	10669.6	48.4			
FH	(60°-80°)	6981.8	31.7			G3/7500
FVH	(80°-90°)	98.9	0.4			G1/100
BL	(0°-30°)	740.5	3.4	B2/1000		
BM	(30°-60°)	1686.1	7.6	B2/2500		
BH	(60°-80°)	517.7	2.3	B2/1000		G2/1000
BVH	(80°-90°)	5.1	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1
2.5°	2556.2	2574.0	2569.6	2565.1	2563.6	2566.6	2568.0	2566.6	2566.6	2566.6	2568.0
5°	2507.5	2522.2	2522.2	2532.6	2547.3	2565.1	2578.4	2584.3	2584.3	2588.7	2587.3
7.5°	2414.3	2426.2	2435.0	2469.0	2505.9	2553.3	2593.1	2613.9	2616.8	2633.1	2639.1
10°	2350.7	2365.5	2380.3	2415.8	2469.0	2540.0	2608.0	2658.2	2665.6	2704.1	2721.8
12.5°	2347.8	2362.5	2381.8	2420.2	2482.3	2557.7	2640.5	2713.0	2726.3	2782.5	2819.4
15°	2378.8	2396.6	2414.3	2461.6	2528.2	2619.8	2708.5	2798.7	2812.0	2891.8	2931.7
17.5°	2442.4	2466.0	2479.4	2526.6	2597.7	2699.6	2816.4	2919.9	2931.7	3024.9	3075.2
20°	2568.0	2596.1	2600.6	2639.1	2708.5	2817.9	2956.9	3085.6	3100.3	3206.7	3262.9
22.5°	2828.3	2868.2	2832.7	2852.0	2914.0	3023.4	3174.2	3336.9	3357.6	3478.7	3529.1
25°	3286.6	3342.7	3251.1	3218.6	3245.1	3359.0	3548.2	3753.8	3777.4	3875.0	3900.1
27.5°	4186.9	4114.6	3975.6	3839.5	3759.7	3824.7	4037.6	4291.9	4321.5	4416.1	4386.5
30°	5176.0	5112.5	4924.7	4623.1	4433.8	4423.5	4620.1	4904.0	4938.0	5028.1	4938.0
32.5°	6166.6	6105.9	5902.0	5530.9	5202.6	5040.0	5176.0	5490.9	5508.7	5566.4	5433.3
35°	7140.9	7078.8	6874.8	6494.8	6091.2	5721.5	5695.0	6049.8	6055.7	6116.3	5918.2
37.5°	8121.1	8069.3	7852.0	7479.4	7081.7	6571.7	6324.8	6579.1	6586.4	6645.6	6440.1
40°	8820.4	8842.6	8693.2	8404.9	8063.5	7506.1	7031.5	7142.4	7098.0	7197.0	7074.3
42.5°	9420.7	9465.0	9334.9	9190.0	8991.9	8501.0	7906.7	7887.5	7816.5	7869.7	7742.6
45°	9939.5	9976.5	9859.8	9825.8	9821.2	9476.8	8863.3	8748.0	8648.8	8638.5	8486.3
47.5°	10130.3	10201.2	10251.5	10365.3	10587.1	10442.2	9852.3	9673.4	9562.5	9481.2	9240.3
50°	10202.7	10278.1	10449.7	10780.8	11305.6	11367.8	10837.0	10635.9	10499.9	10352.1	9997.2
52.5°	10105.2	10239.6	10470.4	11027.7	11789.1	12110.0	11781.7	11605.8	11450.6	11209.5	10683.3
55°	9530.0	9664.6	10136.2	11024.7	12030.1	12630.4	12674.6	12596.3	12421.9	12041.9	11237.7
57.5°	8317.7	8517.3	9263.9	10649.2	12025.6	13078.3	13549.9	13606.1	13411.0	12866.9	11673.8
60°	6638.2	6908.8	7819.5	9816.8	11654.6	13320.8	14317.2	14598.2	14391.2	13680.1	12027.1
62.5°	4632.0	4945.4	5807.3	8512.8	10806.0	13146.3	14877.6	15396.5	15239.8	14407.4	12163.2
65°	2825.3	2925.9	3620.7	6698.8	9363.0	12415.9	15050.6	15828.3	15776.5	14852.5	11962.1
67.5°	1882.1	1966.4	2165.9	4593.5	7268.1	10956.7	14636.6	15752.8	15767.6	14780.0	11225.8
70°	1134.0	1206.4	1336.5	2671.6	4710.3	8672.5	13354.7	14791.8	14877.6	13811.6	9830.2
72.5°	467.2	516.0	634.3	1210.8	2439.4	5504.2	10634.5	12699.9	12899.4	11613.1	7544.5
75°	264.7	289.8	372.6	607.6	1058.5	2565.1	6441.6	9015.6	9309.8	8004.3	4538.8
77.5°	175.9	187.8	241.0	393.3	595.8	875.2	2752.8	4697.1	5258.9	4371.7	1964.8
80°	118.3	128.6	165.5	263.1	387.3	375.6	876.7	1740.1	2140.8	1502.1	479.0
82.5°	79.8	81.3	118.3	173.0	245.4	181.8	258.7	541.1	680.1	434.7	181.8
85°	45.8	44.4	87.2	100.6	109.4	75.4	78.3	162.7	212.9	183.4	103.5
87.5°	5.9	8.9	34.0	26.6	14.8	16.3	16.3	28.1	41.4	44.4	22.1
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°	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1	2565.1
2.5°	2568.0	2566.6	2562.1	2557.7	2547.3	2541.5	2544.4	2541.5	2540.0	2541.5	2547.3
5°	2587.3	2582.8	2571.0	2556.2	2535.5	2510.4	2494.1	2470.5	2448.3	2435.0	2438.0
7.5°	2639.1	2634.6	2618.4	2577.0	2510.4	2405.5	2309.3	2225.1	2161.5	2124.5	2126.0
10°	2721.8	2714.4	2689.3	2597.7	2423.2	2194.0	2003.3	1845.1	1741.6	1692.8	1688.4
12.5°	2819.4	2810.5	2766.2	2578.4	2257.6	1899.8	1636.6	1460.7	1364.6	1321.7	1317.3
15°	2934.7	2922.9	2835.7	2486.8	2016.6	1574.5	1333.5	1202.0	1139.9	1101.5	1102.9
17.5°	3078.1	3057.4	2887.4	2349.2	1754.9	1326.1	1147.3	1048.2	993.5	956.5	953.6
20°	3264.4	3230.4	2928.8	2185.1	1513.9	1169.4	1021.6	938.8	897.4	864.9	859.0
22.5°	3524.6	3475.8	2979.1	2007.8	1343.9	1061.5	928.4	867.9	833.8	796.8	791.0
25°	3846.9	3789.2	3041.2	1843.7	1227.1	968.4	860.5	810.2	770.3	727.4	722.9
27.5°	4297.8	4194.3	3115.1	1709.1	1126.6	888.6	798.4	742.2	696.4	660.8	653.4
30°	4800.5	4630.4	3180.2	1627.8	1034.9	814.7	717.1	660.8	618.0	592.9	588.5
32.5°	5276.6	5046.0	3223.0	1592.2	952.1	730.3	628.3	567.7	535.2	527.8	532.3
35°	5726.0	5421.4	3218.6	1558.3	878.2	646.1	541.1	479.0	453.9	458.3	458.3
37.5°	6243.5	5822.1	3187.5	1505.0	817.5	569.2	465.8	411.0	388.8	390.3	396.3
40°	6845.2	6284.9	3168.3	1404.6	751.0	498.3	403.6	359.3	343.0	337.1	335.6
42.5°	7486.8	6732.8	3171.2	1290.7	668.3	434.7	360.7	323.8	309.0	304.5	303.1
45°	8131.4	7160.1	3175.7	1172.4	581.1	385.9	329.7	298.7	289.8	283.8	283.8
47.5°	8737.6	7523.8	3092.9	1045.3	495.3	348.9	304.5	283.8	276.4	269.1	269.1
50°	9302.4	7766.2	2893.3	897.4	427.2	319.4	285.4	270.6	263.1	255.7	255.7
52.5°	9741.5	7804.7	2563.6	745.2	380.0	297.1	273.5	260.2	251.3	244.0	242.5
55°	9936.7	7563.7	2095.0	603.2	343.0	278.0	261.7	248.4	238.0	230.6	229.2
57.5°	9886.3	7056.6	1633.6	484.9	307.5	258.7	246.9	238.0	226.2	214.3	212.9
60°	9639.4	6378.0	1231.5	403.6	275.0	238.0	230.6	223.2	206.9	189.2	186.2
62.5°	9212.2	5525.0	878.2	334.2	239.5	214.3	211.5	205.5	181.8	149.3	146.4
65°	8558.8	4488.6	591.4	278.0	205.5	187.8	189.2	178.9	147.8	110.9	107.9
67.5°	7603.7	3282.2	378.5	227.7	171.5	156.7	158.2	152.3	125.7	94.6	90.2
70°	6386.9	2173.3	246.9	173.0	137.5	121.3	130.1	131.6	106.5	76.9	73.9
72.5°	4682.2	1283.3	173.0	128.6	100.6	84.3	106.5	109.4	85.8	57.7	54.7
75°	2668.6	609.2	130.1	93.2	62.1	59.1	82.8	82.8	59.1	38.4	35.5
77.5°	1120.6	254.3	91.6	60.6	35.5	34.0	56.2	51.8	29.5	17.7	17.7
80°	323.8	113.9	48.8	29.5	14.8	13.3	22.1	16.3	7.4	3.0	3.0
82.5°	127.1	50.2	19.3	11.8	5.9	5.9	3.0	0.0	0.0	0.0	0.0
85°	75.4	20.7	8.9	4.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	19.3	4.4	3.0	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)