

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: P962108

Luminaire Tested: **NAV-SB2B-835-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962108
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-835-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10641.5 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

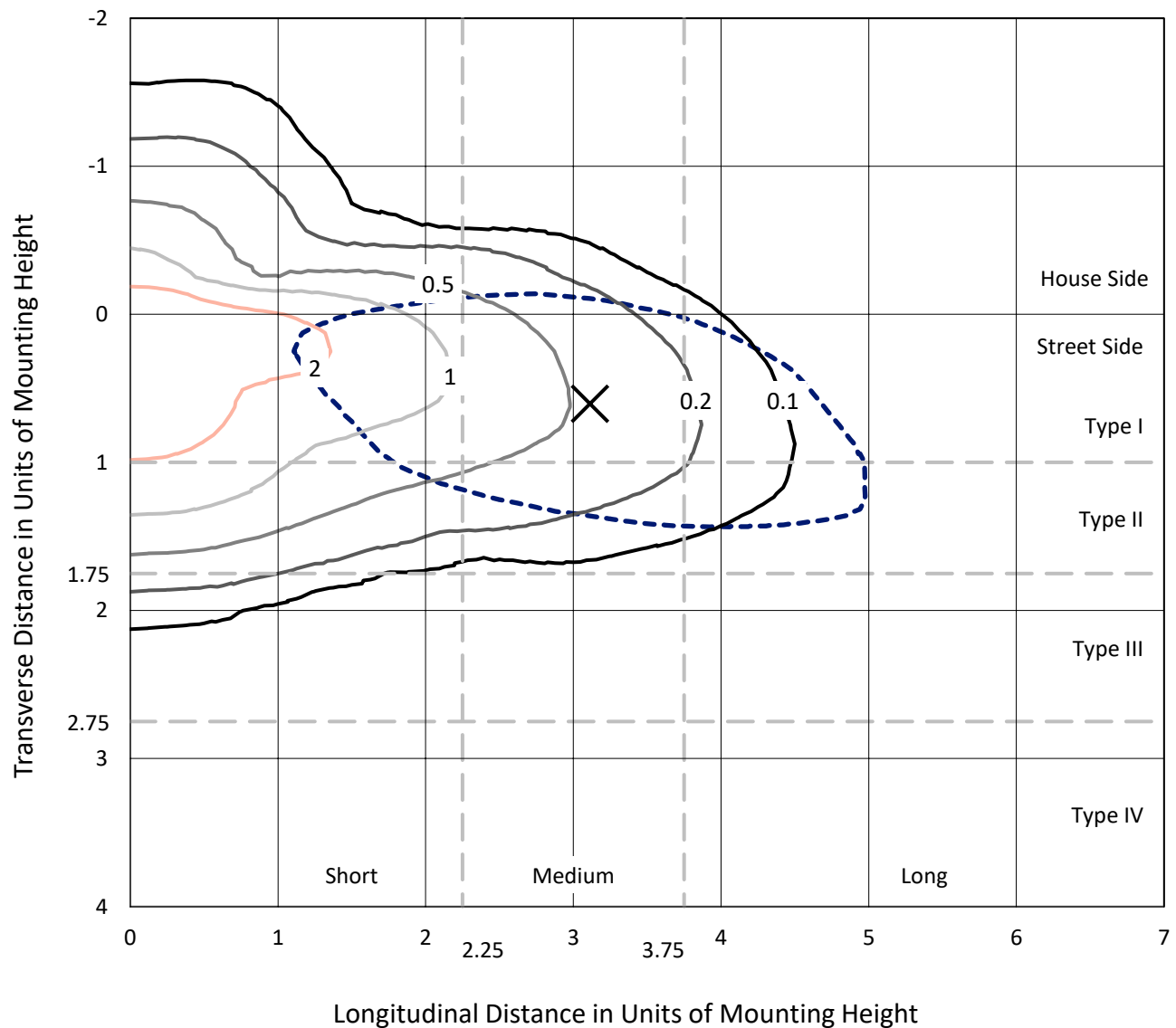
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

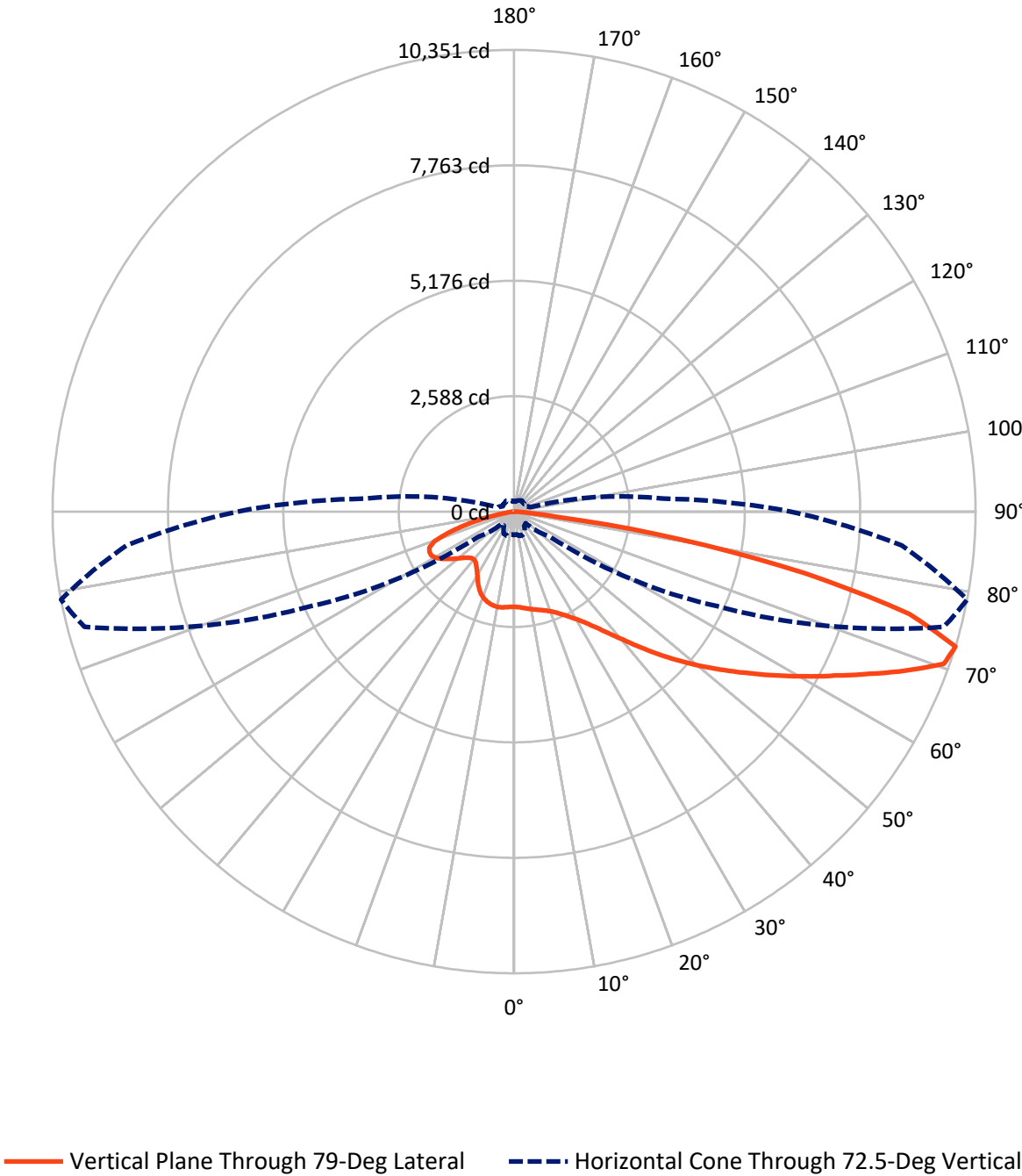
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2341.7	0.0	2341.7
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	8299.8	0.0	8299.8
	% Fixture	78.0	0.0	78.0
Total	Lumens	10641.5	0.0	10641.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.9	1.8
10°-20°	507.0	4.8
20°-30°	818.0	7.7
30°-40°	1227.7	11.5
40°-50°	1741.6	16.4
50°-60°	2199.4	20.7
60°-70°	2233.8	21.0
70°-80°	1522.5	14.3
80°-90°	197.5	1.9
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°	10641.5	100.0
0°-180°	10641.5	100.0

Coefficient of Utilization



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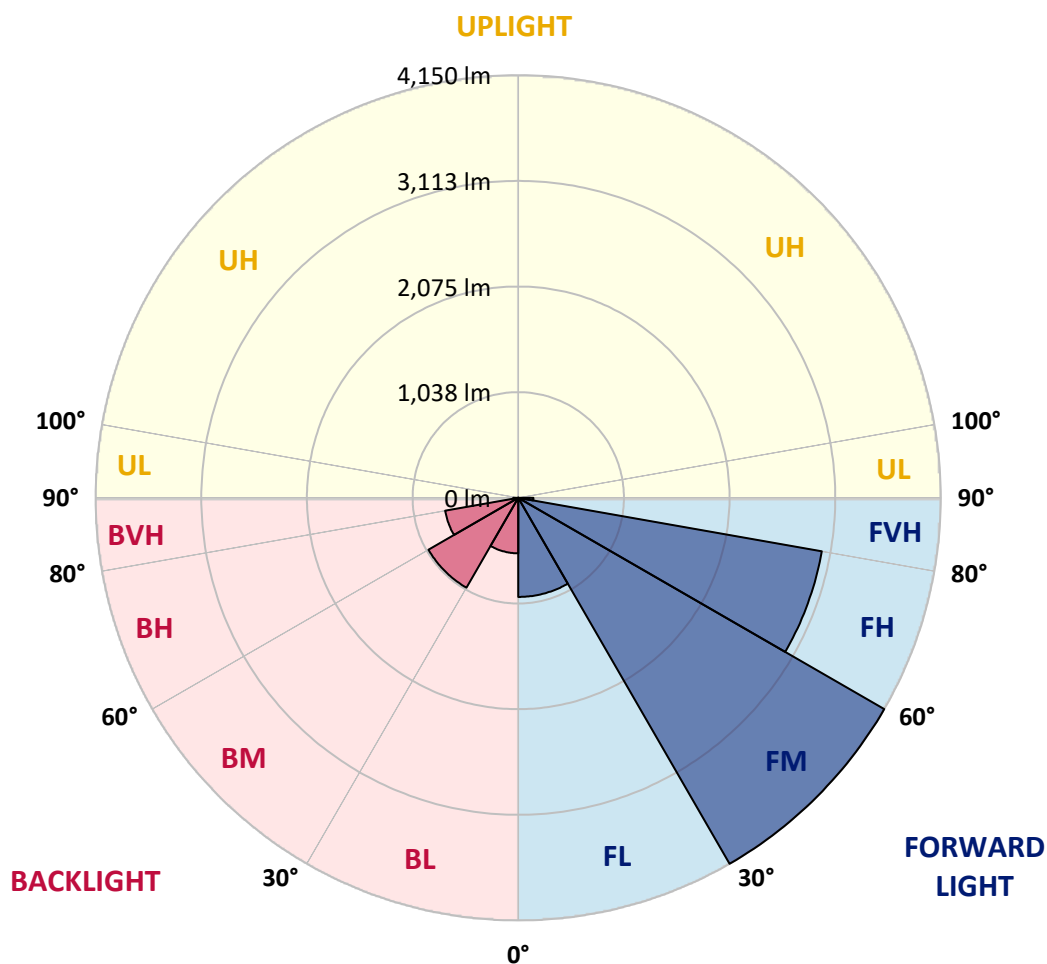
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	973.4	9.1			
FM	(30°-60°)	4150.4	39.0			
FH	(60°-80°)	3027.2	28.4			G2/5000
FVH	(80°-90°)	148.8	1.4			G2/225
BL	(0°-30°)	545.5	5.1	B2/1000		
BM	(30°-60°)	1018.4	9.6	B2/2500		
BH	(60°-80°)	729.1	6.9	B2/1000		G2/1000
BVH	(80°-90°)	48.7	0.5			G1/100
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2
2.5°	2137.3	2127.2	2133.3	2131.1	2133.9	2137.3	2138.5	2140.1	2145.7	2145.2	2144.6
5°	2132.8	2122.7	2131.1	2128.3	2135.6	2143.5	2150.2	2156.5	2165.4	2169.4	2163.8
7.5°	2123.3	2116.5	2124.9	2133.3	2146.9	2158.8	2168.3	2182.3	2195.3	2197.5	2201.5
10°	2067.5	2062.4	2082.2	2104.1	2141.2	2173.3	2194.2	2210.5	2224.6	2226.8	2232.4
12.5°	2009.5	2003.4	2025.3	2055.1	2115.4	2173.3	2217.3	2238.6	2251.0	2258.4	2266.8
15°	2000.0	1994.9	2007.3	2033.2	2083.3	2158.1	2233.0	2272.4	2283.1	2291.6	2295.0
17.5°	2046.1	2036.6	2041.6	2050.6	2079.9	2144.1	2245.4	2310.7	2327.1	2336.0	2336.0
20°	2153.1	2139.6	2131.7	2113.7	2108.6	2146.4	2244.2	2356.9	2378.2	2389.5	2392.4
22.5°	2295.5	2286.5	2269.6	2224.0	2174.4	2173.9	2265.7	2415.9	2455.9	2466.6	2459.9
25°	2467.7	2454.3	2432.8	2370.9	2275.8	2228.6	2301.6	2491.4	2558.4	2561.2	2541.5
27.5°	2665.9	2645.6	2616.3	2534.7	2406.4	2314.0	2356.9	2578.1	2676.0	2674.8	2634.4
30°	2874.7	2854.4	2823.5	2724.4	2562.9	2429.5	2433.4	2671.5	2815.6	2809.4	2740.1
32.5°	3027.2	3012.1	3005.9	2929.3	2743.0	2565.7	2521.2	2775.1	2987.9	2982.2	2885.4
35°	3144.3	3124.6	3132.0	3093.1	2939.4	2718.2	2628.7	2898.4	3197.3	3196.7	3076.2
37.5°	3260.3	3242.8	3249.0	3223.1	3121.2	2911.8	2759.9	3049.2	3456.7	3469.1	3307.1
40°	3366.1	3347.5	3372.4	3348.1	3262.6	3117.8	2909.1	3219.7	3757.3	3781.0	3586.2
42.5°	3429.8	3415.1	3456.2	3456.7	3385.3	3291.8	3072.8	3407.8	4105.2	4158.1	3929.5
45°	3451.7	3446.6	3508.6	3521.5	3493.9	3392.5	3220.3	3612.7	4480.1	4574.7	4320.8
47.5°	3428.0	3418.5	3504.1	3551.8	3573.9	3439.9	3342.5	3834.4	4862.9	5001.3	4747.5
50°	3308.7	3290.1	3417.4	3518.1	3596.3	3470.9	3465.7	4090.6	5298.0	5449.4	5176.4
52.5°	3094.3	3080.1	3224.9	3399.9	3546.8	3486.0	3604.2	4370.3	5711.1	5907.1	5616.0
55°	2820.1	2801.5	2960.8	3189.4	3423.5	3480.9	3742.7	4683.3	6198.6	6397.3	6070.3
57.5°	2385.6	2348.4	2549.9	2820.1	3222.6	3474.7	3886.8	4994.6	6694.0	6932.1	6554.9
60°	1751.7	1696.6	1943.7	2263.9	2829.7	3414.5	4065.3	5343.5	7288.4	7502.8	7084.1
62.5°	1020.0	987.9	1149.4	1448.3	2132.8	3059.9	4165.4	5749.4	7872.6	8097.8	7604.2
65°	792.0	783.0	797.0	820.1	1187.2	2291.0	3856.4	6145.2	8615.6	8773.3	8146.2
67.5°	724.5	717.7	723.9	680.5	602.3	1276.1	3050.9	6245.3	9411.7	9507.3	8620.8
70°	643.9	636.1	656.3	619.2	474.0	580.4	1971.3	5881.7	10044.9	10224.5	8981.6
72.5°	524.6	515.6	562.9	546.0	399.1	372.6	990.1	5017.7	9978.5	10351.1	8723.2
75°	403.0	398.0	454.3	468.3	325.3	293.3	475.1	3729.8	8781.2	9156.6	7518.1
77.5°	312.9	309.0	337.7	389.0	262.3	227.4	292.1	2365.8	6617.4	6683.3	5180.9
80°	234.7	223.4	249.9	301.1	204.3	166.0	198.1	1379.6	4182.9	3791.7	2255.0
82.5°	146.9	141.2	163.3	201.0	144.1	114.3	128.9	762.2	1676.3	987.3	435.1
85°	83.8	81.6	89.0	114.8	78.2	65.9	73.7	336.6	306.2	210.5	131.2
87.5°	33.8	32.7	40.5	51.2	28.7	24.2	25.9	81.1	67.5	62.5	43.4
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°	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2	2136.2
2.5°	2142.4	2142.4	2134.5	2122.2	2108.0	2099.0	2084.4	2080.4	2065.3	2060.8	2068.0
5°	2168.3	2163.8	2139.6	2104.6	2056.9	2012.9	1964.5	1934.1	1891.3	1876.2	1887.4
7.5°	2200.9	2188.6	2146.9	2070.3	1970.2	1871.6	1769.2	1691.5	1617.2	1590.7	1594.1
10°	2230.7	2213.3	2142.4	2008.4	1835.1	1664.5	1501.2	1386.9	1300.3	1264.8	1272.7
12.5°	2260.6	2228.6	2112.5	1905.4	1643.1	1411.7	1237.8	1148.8	1095.4	1052.6	1066.7
15°	2288.7	2243.7	2066.4	1767.5	1432.5	1197.8	1069.5	998.6	955.8	927.6	932.7
17.5°	2321.4	2256.6	1997.1	1592.4	1232.2	1049.8	945.2	902.3	893.9	890.5	892.8
20°	2366.9	2268.4	1906.0	1396.6	1084.7	931.6	877.6	873.6	873.1	871.4	877.0
22.5°	2415.9	2282.6	1785.6	1218.6	959.2	857.8	848.3	840.4	835.4	834.8	841.0
25°	2473.9	2287.1	1634.7	1072.9	852.2	823.0	811.7	799.9	796.5	796.5	799.9
27.5°	2530.2	2271.8	1459.0	946.2	792.0	790.9	776.2	772.3	771.7	773.5	777.9
30°	2586.5	2243.1	1284.5	829.1	757.1	757.1	752.0	754.8	757.1	762.7	766.7
32.5°	2662.5	2212.8	1138.8	742.5	726.7	721.1	726.1	731.7	734.0	741.4	747.5
35°	2774.0	2191.3	1022.7	695.2	695.2	687.9	690.6	689.5	684.5	681.1	689.0
37.5°	2921.5	2190.2	927.1	673.2	668.7	667.6	668.2	660.8	641.1	617.5	618.1
40°	3098.8	2220.7	853.3	658.0	654.7	661.4	658.0	638.4	584.2	543.1	542.0
42.5°	3336.9	2307.3	806.1	639.5	649.5	658.0	644.5	576.4	539.9	512.2	511.1
45°	3617.1	2448.0	781.9	619.7	640.0	650.2	584.9	555.0	525.7	492.5	490.3
47.5°	3934.7	2625.3	776.2	601.2	618.6	624.8	559.5	546.0	512.8	476.7	474.0
50°	4280.3	2835.4	791.4	579.2	587.6	566.3	551.0	538.7	504.4	468.9	464.9
52.5°	4637.7	3066.7	821.8	549.4	556.7	533.1	547.7	537.0	499.3	451.4	448.0
55°	4989.0	3299.7	851.1	514.4	525.2	503.3	538.1	530.2	476.2	422.2	419.3
57.5°	5345.8	3531.6	879.8	483.5	494.8	474.5	523.0	512.2	450.3	395.1	394.0
60°	5716.7	3756.7	893.3	453.7	461.6	448.0	499.9	481.2	421.1	367.6	365.9
62.5°	6064.1	3944.2	871.4	423.8	429.0	423.3	469.4	444.6	391.8	336.6	336.1
65°	6412.5	4055.6	803.8	394.6	395.8	392.9	426.7	405.3	357.4	309.5	306.2
67.5°	6728.3	4118.1	696.3	363.1	360.3	359.2	386.7	362.5	324.2	282.6	279.2
70°	6795.2	3959.4	532.0	326.0	326.0	323.1	342.8	318.1	287.6	253.9	252.8
72.5°	6206.5	3330.6	377.7	283.7	288.2	282.6	298.9	278.1	250.5	228.0	221.2
75°	5004.7	2442.4	274.7	240.4	248.3	238.6	253.9	239.2	215.6	215.0	193.6
77.5°	3438.8	1510.2	199.3	198.1	203.8	191.4	208.8	201.0	179.6	169.9	159.3
80°	1467.5	602.3	145.2	153.1	153.1	141.9	162.2	164.4	145.8	141.2	141.2
82.5°	292.1	171.1	101.9	105.3	99.1	95.7	114.8	127.2	175.6	195.4	195.9
85°	87.8	63.0	61.4	57.4	50.6	51.2	67.5	127.8	157.6	90.1	77.7
87.5°	24.2	15.8	16.3	12.9	10.7	14.0	23.1	96.9	52.9	22.5	19.2
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)