

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: P970002

Luminaire Tested: **NAV-SB6A-830-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970002
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6A-830-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18968.7 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 170.9
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



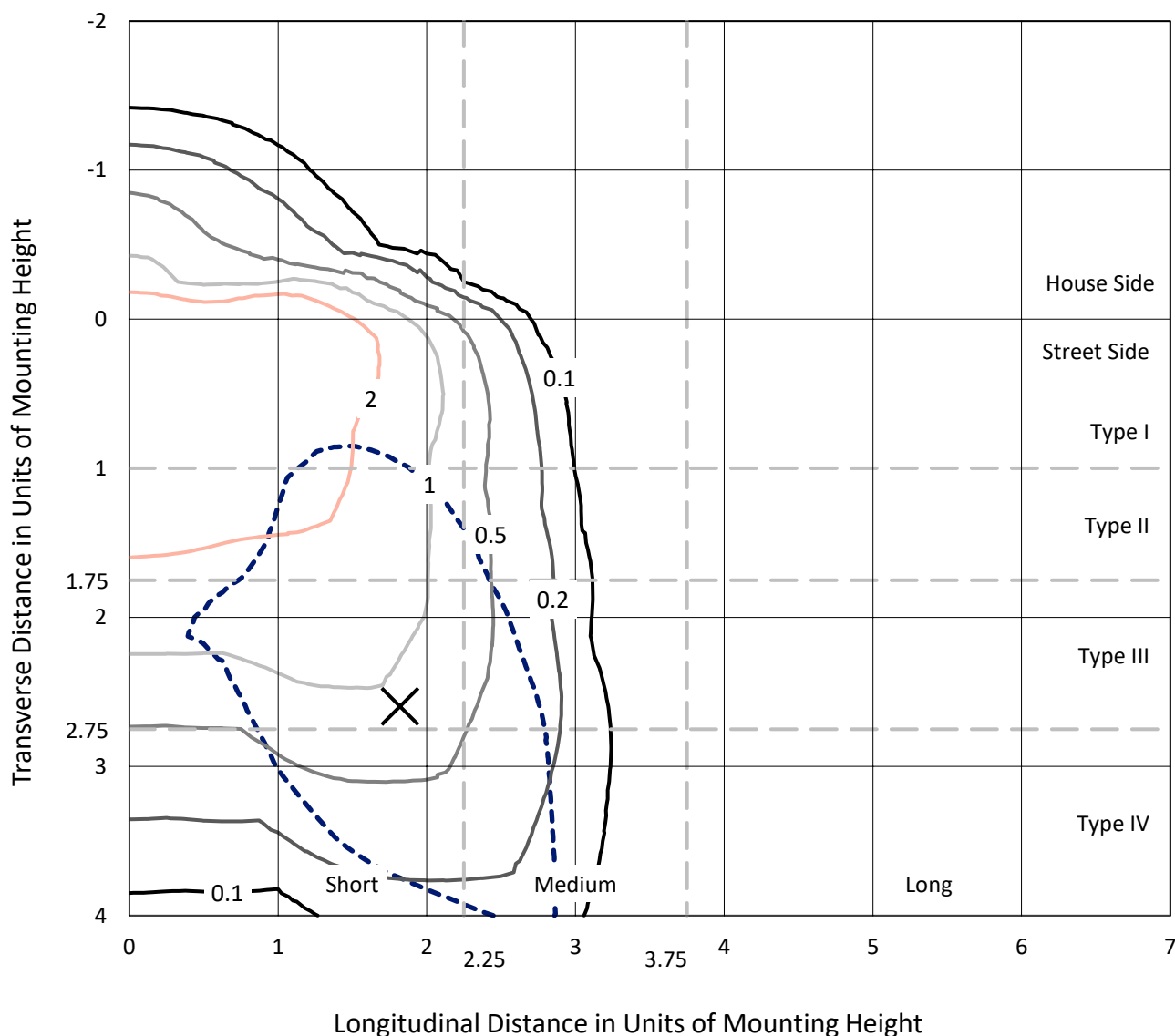
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

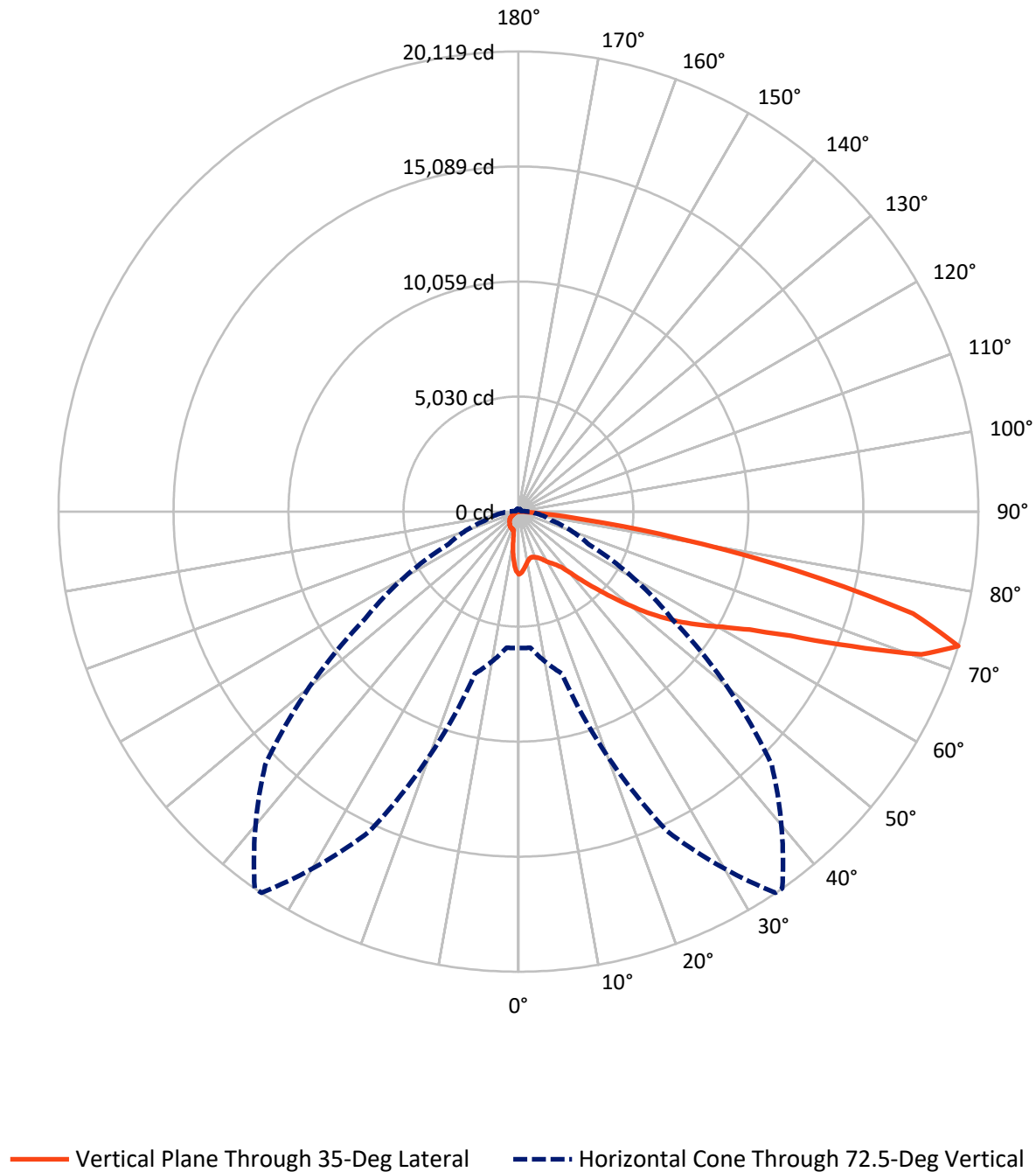


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc

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	2134.8	0.0	2134.8
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	16833.8	0.0	16833.8
	% Fixture	88.7	0.0	88.7
Total	Lumens	18968.7	0.0	18968.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.9	1.2
10°-20°	528.5	2.8
20°-30°	858.5	4.5
30°-40°	1432.4	7.6
40°-50°	2710.2	14.3
50°-60°	4306.5	22.7
60°-70°	5327.4	28.1
70°-80°	3311.6	17.5
80°-90°	267.6	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°	18968.7	100.0
0°-180°	18968.7	100.0

Coefficient of Utilization



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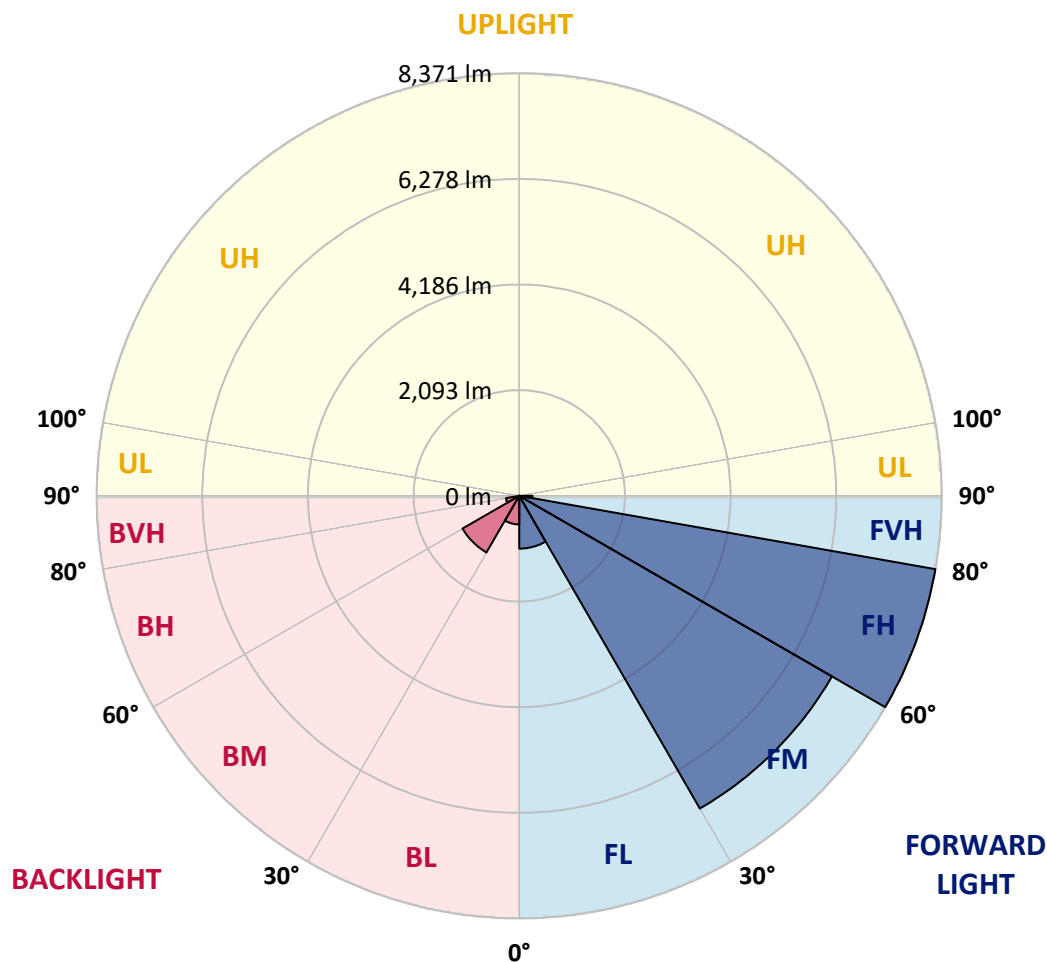
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1045.7	5.5			
FM	(30°-60°)	7153.1	37.7			
FH	(60°-80°)	8371.1	44.1			G4/12000
FVH	(80°-90°)	264.0	1.4			G3/500
BL	(0°-30°)	567.3	3.0	B2/1000		
BM	(30°-60°)	1296.0	6.8	B2/2500		
BH	(60°-80°)	267.9	1.4	B1/500		G1/500
BVH	(80°-90°)	3.6	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-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2
2.5°	2626.9	2649.1	2653.3	2660.3	2660.3	2668.6	2682.5	2701.9	2733.9	2750.6	2761.7
5°	2421.2	2437.9	2458.7	2475.4	2507.4	2511.6	2565.7	2618.6	2692.2	2747.8	2786.8
7.5°	2214.1	2233.6	2261.4	2301.6	2343.4	2355.9	2437.9	2526.8	2643.6	2747.8	2813.1
10°	2068.1	2069.6	2094.6	2134.9	2201.6	2216.9	2316.9	2443.4	2589.4	2731.1	2838.1
12.5°	1986.1	1995.9	2007.0	2037.6	2101.6	2111.2	2218.3	2366.9	2535.1	2721.4	2867.3
15°	1986.1	1993.1	2000.1	2015.4	2066.8	2075.1	2169.6	2318.3	2507.4	2725.6	2914.6
17.5°	2007.0	2018.1	2012.6	2030.6	2084.8	2090.4	2173.8	2304.4	2505.9	2752.0	2986.8
20°	2057.1	2065.4	2054.2	2065.4	2119.6	2130.7	2216.9	2330.8	2529.6	2797.8	3077.3
22.5°	2136.3	2140.4	2114.1	2122.4	2177.9	2191.9	2291.9	2405.9	2586.6	2871.5	3198.1
25°	2236.3	2244.6	2204.4	2214.1	2266.9	2283.6	2398.9	2518.4	2676.9	2973.0	3352.4
27.5°	2351.7	2355.9	2321.1	2319.7	2387.8	2411.4	2528.2	2657.4	2797.8	3100.8	3547.0
30°	2483.7	2496.3	2462.9	2457.3	2543.5	2562.9	2678.3	2828.4	2975.8	3292.6	3823.6
32.5°	2587.9	2597.7	2578.3	2592.1	2679.7	2695.0	2860.4	3070.3	3255.1	3565.1	4200.2
35°	2738.1	2743.6	2699.1	2724.1	2824.3	2863.1	3109.1	3409.4	3606.8	3907.0	4692.2
37.5°	3281.5	3281.5	3092.5	2968.8	3064.6	3099.4	3449.7	3836.1	4040.4	4365.7	5312.2
40°	4033.5	4021.0	3744.3	3491.4	3478.8	3547.0	3934.8	4374.0	4600.5	4916.0	6009.9
42.5°	4835.4	4816.0	4439.3	4189.1	4147.5	4171.0	4494.9	5037.0	5267.7	5587.4	6760.4
45°	5547.0	5541.5	5196.8	4860.4	4785.4	4860.4	5194.0	5812.5	5977.9	6314.2	7509.6
47.5°	6143.3	6143.3	5891.7	5672.1	5633.2	5677.7	6140.5	6672.9	6657.6	7088.4	8239.3
50°	6829.9	6824.3	6585.3	6490.8	6531.1	6593.6	7230.1	7579.1	7360.8	7848.7	8891.1
52.5°	7310.8	7344.1	7262.1	7246.9	7452.6	7561.0	8336.5	8465.8	7990.5	8570.0	9379.0
55°	7691.6	7730.6	7825.1	7932.1	8328.2	8470.0	9408.2	9306.7	8517.2	9195.5	9659.7
57.5°	8230.9	8175.3	8321.3	8532.5	9173.2	9344.2	10446.4	10100.2	8941.2	9702.8	9690.2
60°	8885.5	8893.9	8918.9	9185.7	10016.9	10236.5	11469.3	10850.9	9213.5	10014.1	9351.2
62.5°	9672.2	9684.7	9736.2	10146.2	11149.6	11356.8	12559.0	11465.1	9338.7	9926.6	8475.5
65°	9618.0	9670.8	10244.9	11647.3	12871.7	13076.0	13830.7	11896.0	9149.7	9126.0	6900.8
67.5°	8761.8	8848.0	9808.4	13440.2	15468.1	15695.9	15367.9	11980.8	8333.8	7096.8	4501.8
70°	7638.8	7669.4	8824.4	15052.4	18474.4	18705.1	16744.0	11048.2	6323.9	3958.3	2016.7
72.5°	5965.4	5972.4	7327.5	15426.4	20106.1	20118.6	15664.0	8201.7	3401.1	1520.5	700.5
75°	4261.4	4219.7	4907.7	12510.3	17689.0	17830.8	11743.1	3847.2	1299.5	718.5	348.9
77.5°	2284.9	2330.8	2777.0	7419.3	12219.8	12461.7	6407.4	1109.2	661.5	489.2	230.7
80°	706.0	745.0	1138.4	3396.8	6921.6	7067.6	2375.3	493.4	461.5	348.9	151.5
82.5°	222.4	230.7	530.9	1427.4	2872.9	2939.6	688.0	279.4	315.5	230.7	89.0
85°	64.0	65.3	236.3	532.3	710.2	724.2	193.2	108.4	180.7	143.2	45.8
87.5°	7.0	22.2	89.0	89.0	62.5	61.2	20.8	23.7	51.5	18.0	8.3
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°	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2	2749.2
2.5°	2754.8	2756.1	2738.1	2707.5	2674.1	2646.3	2611.6	2583.8	2564.3	2558.8	2568.5
5°	2774.2	2764.5	2713.1	2619.9	2508.8	2412.8	2305.8	2221.1	2165.4	2141.8	2150.1
7.5°	2803.4	2775.6	2663.1	2479.6	2266.9	2077.9	1886.1	1737.4	1642.9	1595.6	1602.6
10°	2828.4	2772.8	2579.6	2276.6	1951.4	1665.1	1406.6	1227.2	1127.2	1079.9	1081.4
12.5°	2852.1	2771.4	2471.2	2036.2	1595.6	1245.4	1004.9	915.9	888.2	878.4	875.7
15°	2896.5	2775.6	2335.1	1761.0	1241.2	941.0	853.4	852.0	857.5	854.7	853.4
17.5°	2957.6	2779.8	2180.7	1469.1	957.7	829.7	825.6	838.1	846.4	842.2	840.9
20°	3036.9	2796.4	2016.7	1180.0	822.8	802.0	811.7	822.8	829.7	822.8	821.4
22.5°	3148.1	2825.6	1837.4	947.9	779.7	785.3	793.7	806.2	813.1	803.4	802.0
25°	3284.3	2871.5	1660.9	824.2	758.9	765.8	778.4	792.2	800.5	790.9	789.5
27.5°	3460.8	2945.1	1498.3	796.4	738.0	742.2	760.2	781.2	792.2	779.7	779.7
30°	3716.5	3066.1	1357.9	808.9	725.5	715.8	740.8	770.0	782.5	771.4	770.0
32.5°	4055.7	3237.1	1271.7	828.4	720.0	685.2	708.9	746.4	767.2	760.2	760.2
35°	4500.5	3497.0	1238.4	850.6	715.8	653.2	669.9	710.2	746.4	753.3	753.3
37.5°	5039.7	3858.3	1248.1	860.4	703.3	626.8	635.2	669.9	717.2	739.4	745.0
40°	5652.7	4279.5	1303.7	850.6	689.4	604.6	606.0	632.4	674.1	707.5	718.5
42.5°	6285.1	4771.5	1406.6	814.5	676.9	585.2	581.0	599.0	626.8	650.5	660.2
45°	6886.9	5277.4	1508.0	764.4	661.5	565.7	556.0	562.9	568.5	578.2	583.7
47.5°	7412.3	5633.2	1478.9	718.5	640.7	543.5	526.7	524.0	507.3	505.9	504.5
50°	7775.0	5711.0	1313.4	672.7	610.2	518.4	492.0	475.3	446.2	432.2	433.7
52.5°	7890.3	5403.9	1073.0	626.8	560.2	485.0	447.5	421.2	385.0	372.5	371.0
55°	7737.5	4802.0	857.5	571.2	490.7	440.5	398.9	364.2	335.0	319.7	319.7
57.5°	7363.6	4036.2	678.2	505.9	417.0	390.5	348.9	314.2	289.0	273.8	271.0
60°	6743.7	3205.1	536.5	428.0	355.8	336.3	293.3	271.0	248.8	230.7	226.5
62.5°	5802.7	2287.8	421.2	339.2	297.5	275.2	250.2	233.5	207.0	182.0	177.9
65°	4528.2	1399.6	325.2	248.8	239.0	228.0	212.7	197.3	165.4	140.4	136.2
67.5°	2856.3	663.0	232.1	187.7	189.0	183.5	176.5	164.0	140.4	118.2	115.3
70°	1257.9	321.0	152.9	143.2	140.4	140.4	146.0	141.8	119.5	98.7	94.5
72.5°	428.0	172.3	114.0	108.4	101.5	100.0	122.3	118.2	95.9	76.5	72.3
75°	223.8	115.3	83.4	77.8	61.2	73.7	97.3	91.7	68.1	50.0	45.8
77.5°	146.0	82.0	57.0	50.0	34.7	48.7	72.3	64.0	40.3	25.0	22.2
80°	91.7	54.2	33.3	23.7	16.7	26.4	38.9	27.8	15.3	5.5	4.2
82.5°	48.7	27.8	12.5	8.3	7.0	8.3	9.7	7.0	2.8	0.0	0.0
85°	19.5	9.7	4.2	2.8	1.4	0.0	2.8	1.4	0.0	0.0	0.0
87.5°	7.0	1.4	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)