

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: P963513

Luminaire Tested: **NAV-SB3A-735-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10073.7 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

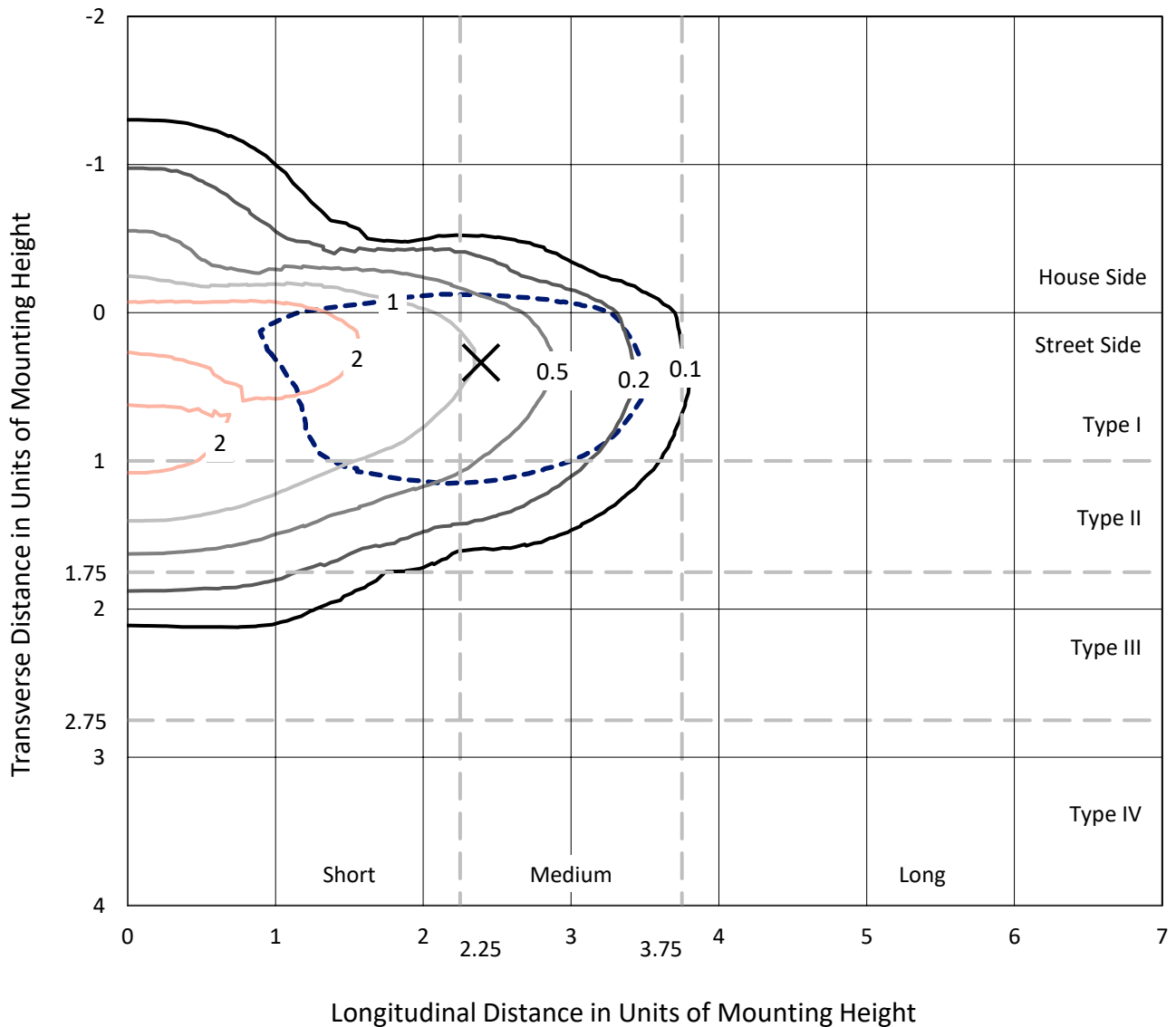
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

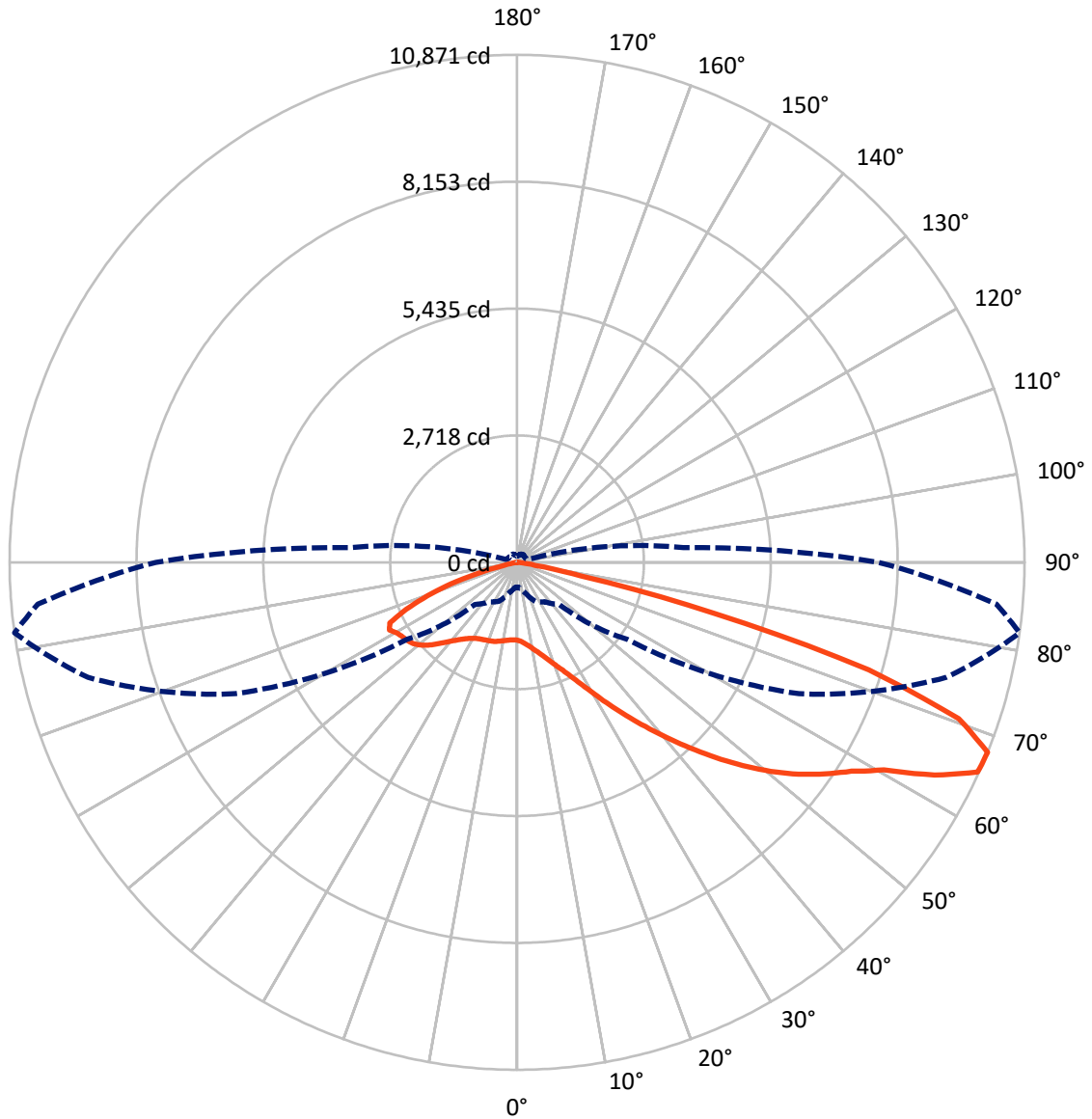
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1824.8	0.0	1824.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	8248.9	0.0	8248.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	10073.7	0.0	10073.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	1.5
10°-20°	386.4	3.8
20°-30°	618.8	6.1
30°-40°	1094.3	10.9
40°-50°	1917.3	19.0
50°-60°	2557.2	25.4
60°-70°	2380.6	23.6
70°-80°	913.7	9.1
80°-90°	56.7	0.6
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°	10073.7	100.0
0°-180°	10073.7	100.0

Coefficient of Utilization



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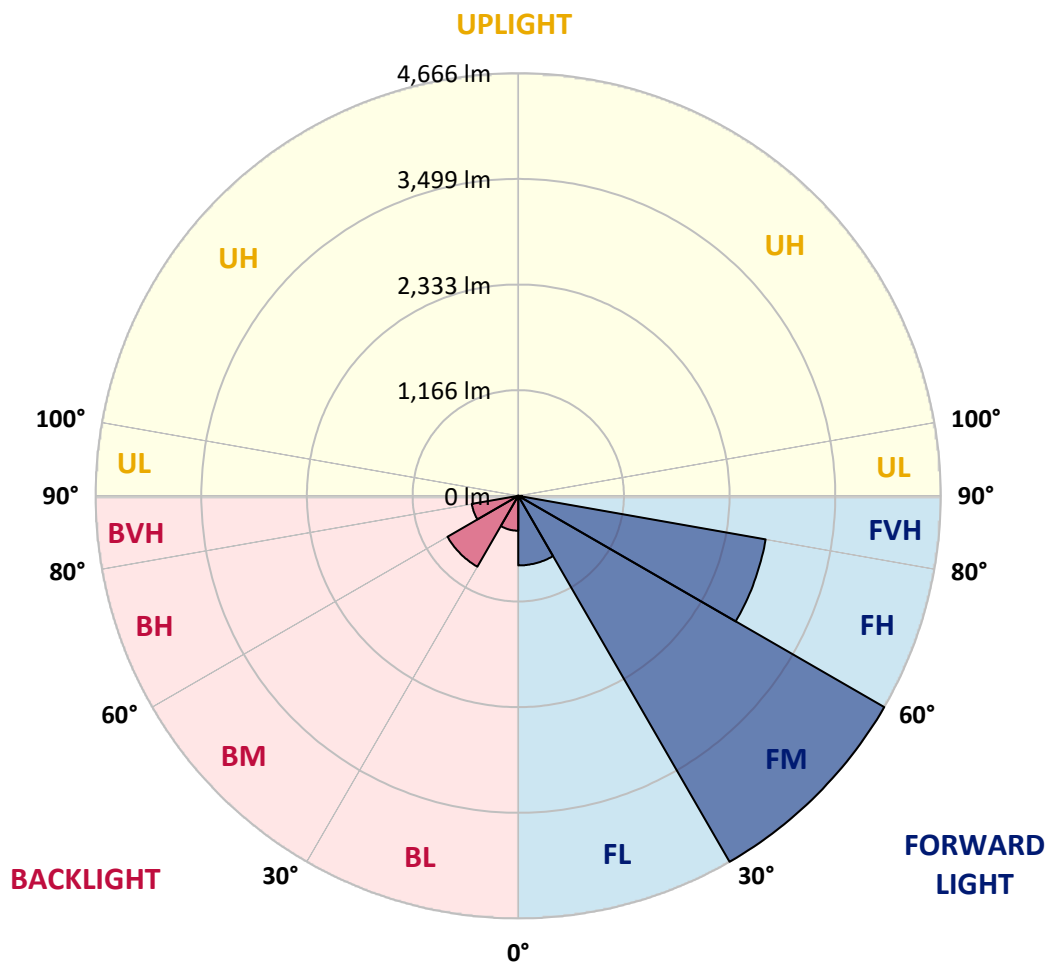
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	768.5	7.6			
FM (30°-60°)	4665.7	46.3			
FH (60°-80°)	2773.4	27.5			G2/5000
FVH (80°-90°)	41.3	0.4			G1/100
BL (0°-30°)	385.4	3.8	B1/500		
BM (30°-60°)	903.1	9.0	B1/1000		
BH (60°-80°)	520.8	5.2	B2/1000		G2/1000
BVH (80°-90°)	15.5	0.2			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°	82°	85°
0°	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9
2.5°	1763.9	1774.1	1768.2	1765.4	1760.2	1753.0	1747.2	1729.1	1710.2	1697.9	1693.5
5°	1799.4	1809.5	1808.8	1811.8	1815.4	1817.5	1816.1	1795.8	1768.9	1747.9	1735.6
7.5°	1768.9	1780.5	1790.0	1804.5	1829.9	1856.7	1869.8	1865.4	1837.8	1808.8	1793.6
10°	1682.6	1694.9	1717.5	1751.5	1805.2	1863.2	1911.8	1934.3	1917.0	1885.0	1864.0
12.5°	1524.6	1536.9	1581.1	1655.1	1745.1	1845.8	1938.7	1998.9	2003.3	1971.3	1946.7
15°	1346.8	1359.1	1406.3	1499.2	1636.2	1798.0	1953.1	2067.0	2105.5	2077.9	2048.2
17.5°	1236.6	1247.5	1283.0	1357.7	1500.6	1702.2	1948.1	2139.6	2227.3	2205.6	2170.0
20°	1203.2	1212.7	1229.4	1281.6	1400.6	1602.9	1914.7	2207.7	2358.6	2346.3	2306.4
22.5°	1238.8	1247.5	1252.6	1275.8	1350.4	1537.6	1872.7	2277.3	2510.9	2512.4	2463.8
25°	1320.7	1329.4	1323.7	1338.1	1370.7	1517.3	1856.7	2359.3	2702.4	2718.4	2663.3
27.5°	1455.6	1456.3	1442.6	1441.9	1446.9	1547.7	1873.4	2447.1	2943.9	2973.6	2905.5
30°	1726.2	1715.3	1662.3	1605.0	1578.9	1639.2	1919.8	2550.8	3229.0	3281.8	3196.4
32.5°	2143.2	2127.3	2030.0	1893.0	1755.2	1786.4	2003.3	2669.0	3539.3	3635.1	3530.7
35°	2595.8	2591.4	2489.9	2286.1	2045.3	1996.0	2138.9	2824.3	3878.1	4030.4	3906.4
37.5°	3016.5	3014.2	2956.2	2716.1	2423.2	2288.2	2356.5	3027.3	4240.7	4461.2	4314.7
40°	3400.8	3407.4	3349.4	3134.7	2839.5	2663.3	2652.4	3278.3	4644.0	4930.5	4756.4
42.5°	3733.0	3740.2	3681.5	3522.7	3250.7	3078.1	3015.8	3585.8	5037.8	5434.5	5228.5
45°	3958.6	4003.5	3994.8	3867.9	3672.8	3493.7	3452.3	3971.7	5486.7	5969.1	5727.5
47.5°	4022.4	4063.7	4129.0	4146.4	4027.5	3851.2	3900.5	4436.5	5940.8	6504.3	6229.4
50°	3865.1	3903.5	4039.1	4219.7	4302.3	4248.0	4336.5	4934.8	6405.6	7038.2	6722.0
52.5°	3554.6	3593.8	3764.9	4050.7	4387.9	4559.1	4773.8	5425.8	6856.1	7543.7	7188.2
55°	3105.6	3147.0	3366.7	3690.2	4224.7	4687.5	5138.6	5916.1	7268.8	7998.4	7608.9
57.5°	2495.0	2525.4	2753.9	3206.5	3814.2	4559.8	5407.7	6451.3	7657.5	8445.2	8026.0
60°	1626.1	1652.9	1918.4	2423.2	3133.9	4133.4	5461.4	7048.3	8174.0	9026.2	8588.1
62.5°	1081.4	1099.5	1257.0	1627.5	2207.0	3314.5	5147.3	7524.8	8931.1	10037.2	9552.0
65°	742.0	760.1	917.5	1175.7	1425.9	2192.5	4244.3	7461.7	9617.3	10840.1	10266.4
67.5°	529.4	544.7	678.1	921.8	1032.1	1273.6	2877.2	6655.2	9518.6	10870.5	10304.8
70°	379.4	388.1	498.3	718.0	820.3	765.2	1599.9	5090.0	8334.2	10037.9	9520.0
72.5°	265.5	268.3	345.9	546.8	660.7	558.4	761.6	3393.6	6303.4	7878.8	7380.4
75°	179.9	183.5	232.8	401.1	530.1	426.5	403.2	1819.7	3700.4	4361.1	3909.2
77.5°	110.3	111.7	150.2	274.2	396.8	324.9	259.6	771.0	1431.7	1405.6	1198.1
80°	62.4	62.4	95.7	170.5	270.5	209.6	182.0	327.8	453.3	398.2	351.1
82.5°	34.8	35.6	69.6	105.9	179.2	124.0	100.0	151.6	195.8	173.3	150.9
85°	14.6	16.0	42.7	50.0	85.6	61.6	40.6	63.9	72.6	64.6	47.2
87.5°	1.4	2.2	13.0	9.4	10.1	12.3	5.8	12.3	10.1	10.1	7.3
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°	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9	1668.9
2.5°	1679.8	1668.9	1641.3	1609.4	1567.3	1547.0	1519.5	1500.6	1484.6	1486.1	1471.6
5°	1712.4	1684.8	1623.2	1546.3	1450.6	1382.4	1309.8	1259.8	1219.2	1210.5	1190.9
7.5°	1757.4	1713.8	1605.8	1467.3	1305.5	1183.0	1073.4	1003.1	953.0	937.1	921.1
10°	1815.4	1752.2	1583.3	1367.9	1135.1	979.1	861.6	806.5	772.4	760.9	752.1
12.5°	1882.8	1796.5	1553.6	1246.7	959.5	809.4	734.7	707.1	696.3	692.6	690.4
15°	1967.7	1851.7	1508.6	1103.1	810.9	705.7	673.8	670.1	671.6	670.1	669.4
17.5°	2068.4	1911.8	1435.3	955.2	710.7	652.7	641.1	644.0	647.7	647.0	645.5
20°	2178.7	1971.3	1341.7	823.9	642.6	615.0	608.5	611.4	614.3	612.8	612.1
22.5°	2304.2	2035.1	1238.1	721.7	596.9	580.3	573.0	573.7	573.7	570.8	569.4
25°	2454.4	2105.5	1129.2	649.1	562.1	549.0	540.4	537.4	533.1	524.4	523.0
27.5°	2633.5	2180.2	1024.8	598.4	534.5	522.2	512.1	504.8	493.9	479.4	478.0
30°	2835.1	2270.9	936.3	566.4	512.8	500.4	488.8	478.0	462.0	443.8	442.4
32.5°	3072.3	2368.1	871.8	545.4	493.2	480.1	466.4	453.3	435.9	417.8	418.5
35°	3355.1	2485.5	834.0	530.9	478.0	460.5	445.4	430.8	417.8	401.8	400.4
37.5°	3661.9	2610.3	822.5	523.7	467.8	441.0	423.5	413.4	411.9	402.5	401.8
40°	3997.7	2758.3	831.2	519.3	456.9	422.1	403.2	401.1	404.7	388.1	388.8
42.5°	4353.2	2933.8	845.7	514.2	441.7	403.2	385.1	385.1	382.2	359.1	359.1
45°	4737.5	3136.1	860.2	501.9	423.5	384.4	370.6	365.5	353.2	330.8	330.0
47.5°	5124.8	3342.1	871.0	479.4	401.8	368.5	356.1	344.5	326.4	306.1	305.3
50°	5492.6	3527.0	859.5	446.1	377.1	353.2	340.2	324.2	304.6	290.8	288.6
52.5°	5821.1	3687.3	810.2	406.9	351.1	337.2	325.6	308.9	293.0	278.5	277.1
55°	6106.8	3817.2	723.1	369.9	327.8	323.5	311.9	290.8	269.1	256.8	255.3
57.5°	6381.0	3915.8	614.3	339.5	306.8	308.2	290.8	271.9	251.6	238.6	237.2
60°	6745.8	4047.8	504.1	311.2	284.3	288.6	269.8	256.0	230.6	213.9	211.8
62.5°	7329.0	4253.0	400.4	276.3	258.2	259.6	251.6	235.0	204.5	184.9	183.5
65°	7791.7	4177.6	315.5	238.6	228.5	230.6	230.6	212.5	179.9	157.3	155.2
67.5°	7739.5	3577.0	251.6	201.6	200.2	201.6	206.7	191.5	159.6	141.4	138.5
70°	7129.5	2845.3	201.6	167.6	174.0	170.5	184.9	174.8	143.6	125.5	123.3
72.5°	5817.5	2049.7	153.8	138.5	133.5	139.3	166.8	157.3	119.7	99.3	97.2
75°	3399.4	1093.7	114.6	109.5	96.5	116.0	147.9	134.2	91.4	73.3	71.0
77.5°	1106.8	381.5	84.2	80.5	71.9	93.6	126.2	113.2	74.7	58.0	55.9
80°	296.6	115.3	57.3	53.0	46.4	69.6	100.0	89.9	53.7	37.7	37.0
82.5°	118.9	48.6	33.3	29.7	25.4	47.9	79.0	72.6	39.9	24.0	24.0
85°	38.4	16.0	12.3	9.4	11.6	29.7	47.2	49.3	28.3	12.3	9.4
87.5°	5.1	2.2	2.2	2.9	2.2	5.1	14.6	13.7	8.0	1.4	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)