

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: P961539

Luminaire Tested: **NAV-SB2A-827-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961539
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-SB2A-827-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 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: 6053.6 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.3
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



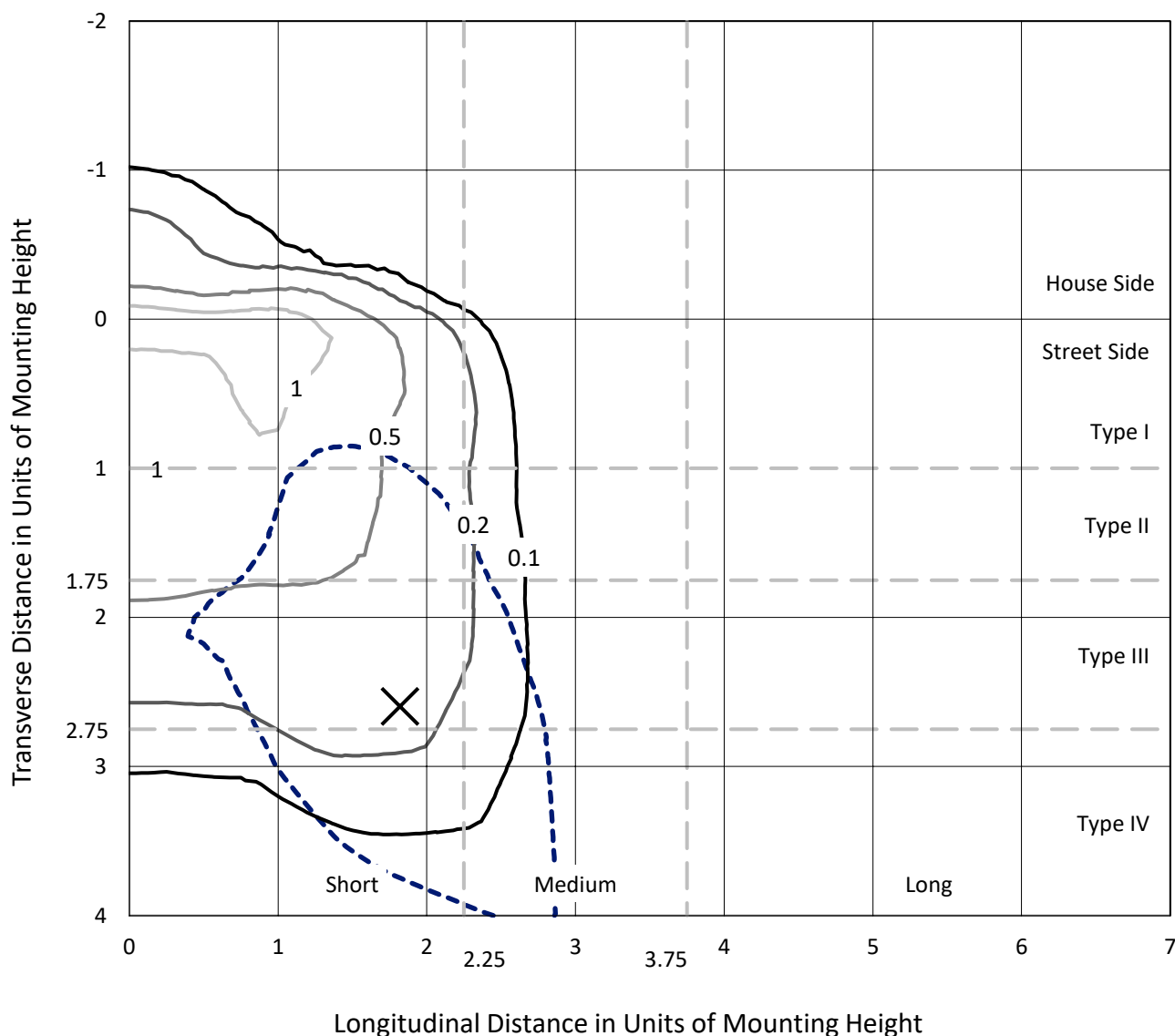
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

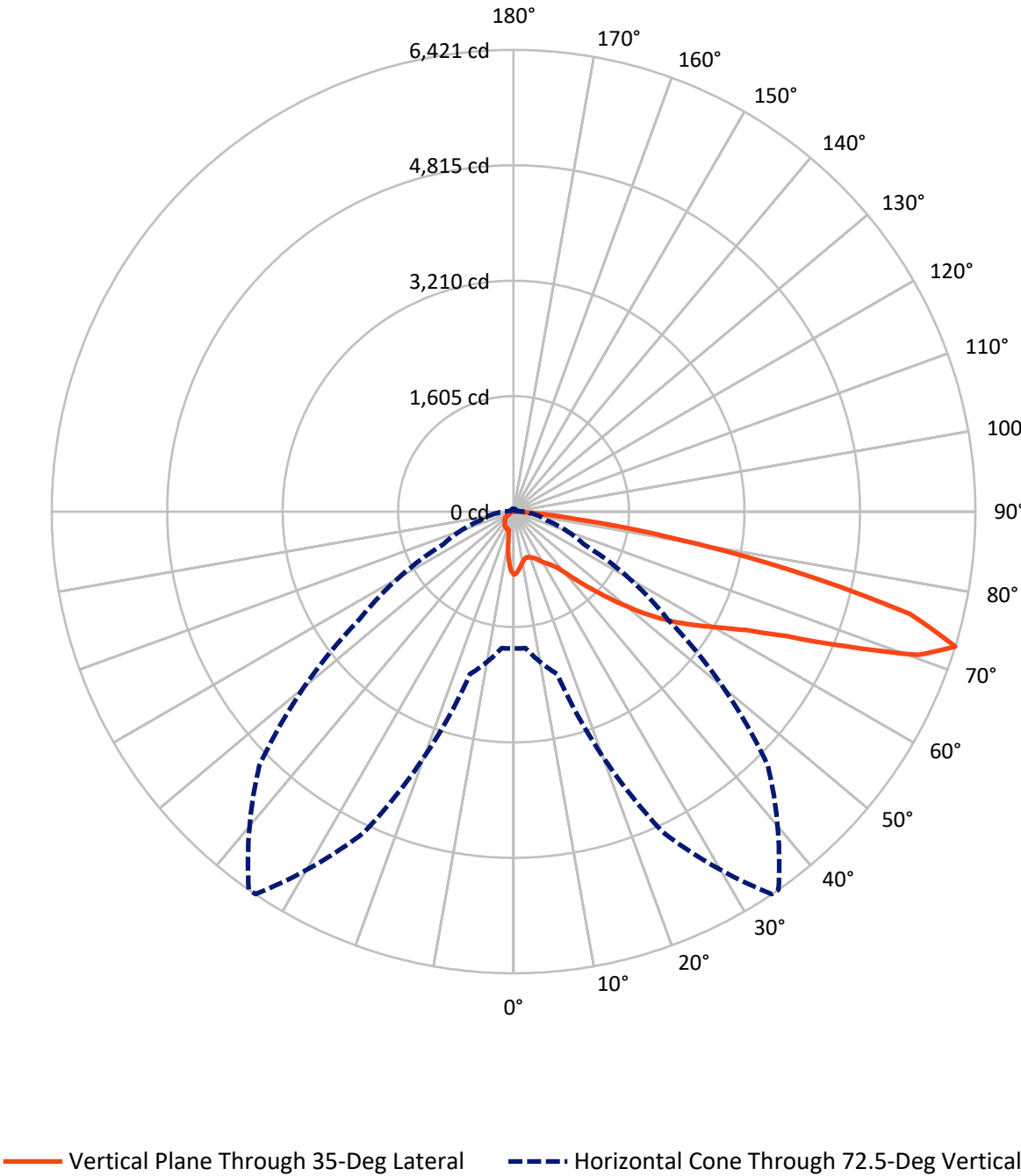


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc

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	681.3	0.0	681.3
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	5372.3	0.0	5372.3
	% Fixture	88.7	0.0	88.7
Total	Lumens	6053.6	0.0	6053.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	1.2
10°-20°	168.7	2.8
20°-30°	274.0	4.5
30°-40°	457.1	7.6
40°-50°	864.9	14.3
50°-60°	1374.4	22.7
60°-70°	1700.2	28.1
70°-80°	1056.8	17.5
80°-90°	85.4	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°	6053.6	100.0
0°-180°	6053.6	100.0

Coefficient of Utilization



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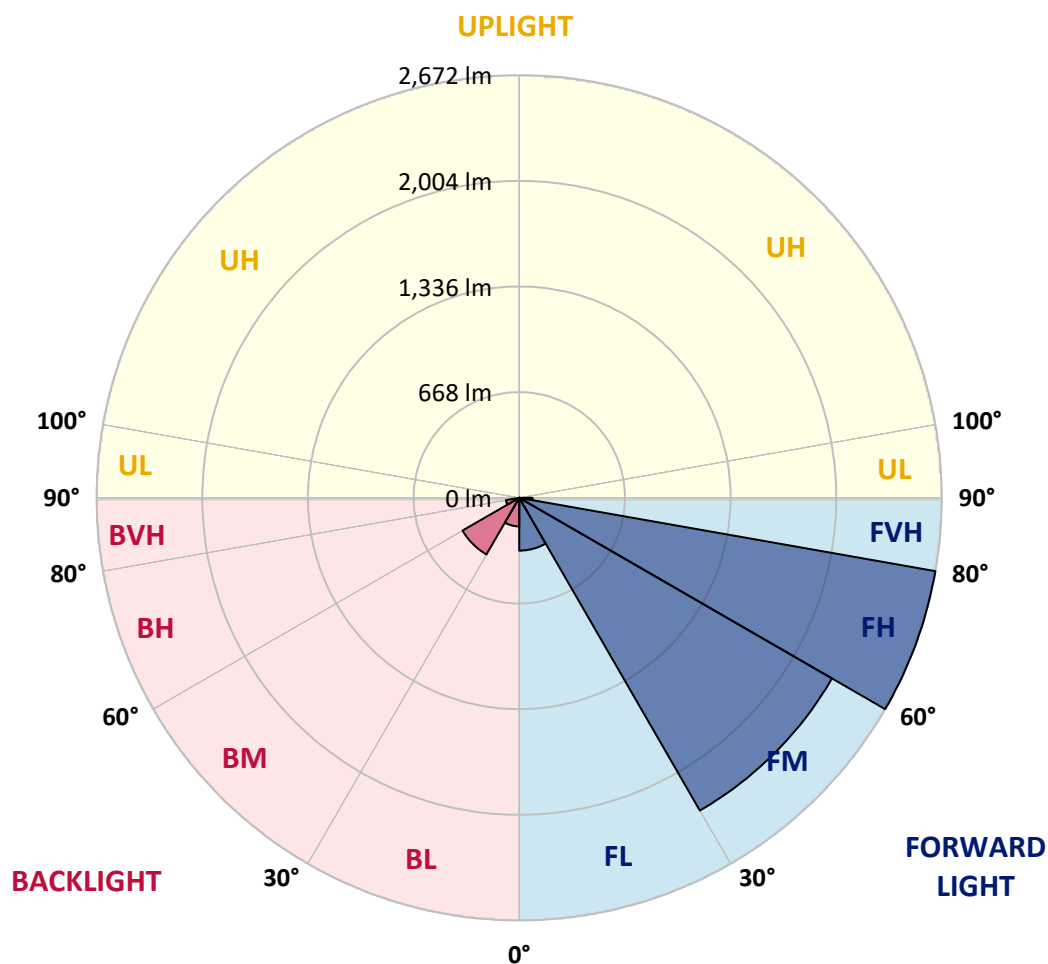
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	333.7	5.5			
FM	(30°-60°)	2282.8	37.7			
FH	(60°-80°)	2671.5	44.1			G2/5000
FVH	(80°-90°)	84.3	1.4			G1/100
BL	(0°-30°)	181.0	3.0	B1/500		
BM	(30°-60°)	413.6	6.8	B1/1000		
BH	(60°-80°)	85.5	1.4	B0/110		G0/110
BVH	(80°-90°)	1.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4
2.5°	838.3	845.4	846.8	849.0	849.0	851.7	856.1	862.3	872.5	877.8	881.4
5°	772.6	778.0	784.6	790.0	800.2	801.6	818.9	835.7	859.2	876.9	889.4
7.5°	706.6	712.8	721.7	734.5	747.8	751.8	778.0	806.4	843.7	876.9	897.8
10°	660.0	660.5	668.5	681.3	702.6	707.5	739.4	779.8	826.4	871.7	905.8
12.5°	633.9	636.9	640.5	650.3	670.7	673.7	708.0	755.4	809.0	868.5	915.1
15°	633.9	636.1	638.3	643.2	659.6	662.3	692.4	739.8	800.2	869.8	930.2
17.5°	640.5	644.1	642.3	648.0	665.3	667.2	693.7	735.4	799.7	878.2	953.2
20°	656.5	659.2	655.6	659.2	676.4	680.0	707.5	743.8	807.3	892.9	982.1
22.5°	681.7	683.1	674.7	677.3	695.1	699.5	731.4	767.8	825.4	916.5	1020.7
25°	713.7	716.4	703.5	706.6	723.4	728.8	765.6	803.7	854.3	948.7	1069.9
27.5°	750.5	751.8	740.8	740.4	762.1	769.6	806.9	848.1	892.9	989.6	1132.0
30°	792.6	796.6	786.0	784.2	811.7	817.9	854.7	902.6	949.7	1050.8	1220.3
32.5°	825.9	829.0	822.8	827.3	855.2	860.1	912.9	979.8	1038.8	1137.8	1340.5
35°	873.8	875.6	861.4	869.4	901.3	913.8	992.3	1088.0	1151.1	1246.9	1497.5
37.5°	1047.2	1047.2	987.0	947.5	978.1	989.1	1101.0	1224.3	1289.4	1393.3	1695.4
40°	1287.2	1283.2	1194.9	1114.3	1110.3	1132.0	1255.7	1395.9	1468.2	1568.9	1918.0
42.5°	1543.1	1537.0	1416.8	1336.9	1323.6	1331.2	1434.5	1607.5	1681.1	1783.2	2157.5
45°	1770.3	1768.5	1658.4	1551.1	1527.2	1551.1	1657.6	1855.0	1907.8	2015.2	2396.6
47.5°	1960.6	1960.6	1880.3	1810.2	1797.7	1812.0	1959.7	2129.5	2124.7	2262.2	2629.4
50°	2179.7	2177.9	2101.7	2071.4	2084.3	2104.3	2307.5	2418.8	2349.1	2504.8	2837.5
52.5°	2333.2	2343.8	2317.6	2312.8	2378.4	2413.1	2660.5	2701.8	2550.1	2735.0	2993.2
55°	2454.7	2467.1	2497.3	2531.4	2657.8	2703.1	3002.5	2970.1	2718.2	2934.7	3082.8
57.5°	2626.8	2609.0	2655.7	2723.0	2927.5	2982.1	3333.8	3223.4	2853.5	3096.5	3092.5
60°	2835.8	2838.4	2846.3	2931.5	3196.8	3266.9	3660.3	3463.0	2940.4	3196.0	2984.3
62.5°	3086.8	3090.8	3107.2	3238.1	3558.3	3624.4	4008.1	3658.9	2980.3	3168.0	2704.9
65°	3069.5	3086.4	3269.5	3717.1	4107.9	4173.1	4414.0	3796.5	2920.0	2912.4	2202.3
67.5°	2796.2	2823.8	3130.2	4289.3	4936.5	5009.2	4904.5	3823.6	2659.7	2264.8	1436.7
70°	2437.9	2447.6	2816.2	4803.9	5895.9	5969.5	5343.6	3525.9	2018.2	1263.3	643.6
72.5°	1903.8	1906.0	2338.5	4923.2	6416.6	6420.6	4999.0	2617.5	1085.4	485.2	223.6
75°	1360.0	1346.6	1566.2	3992.6	5645.3	5690.5	3747.7	1227.7	414.7	229.3	111.3
77.5°	729.2	743.8	886.2	2367.8	3899.8	3977.0	2044.9	353.9	211.2	156.1	73.6
80°	225.3	237.8	363.3	1084.0	2209.0	2255.5	758.1	157.4	147.3	111.3	48.4
82.5°	70.9	73.6	169.4	455.5	916.9	938.2	219.6	89.2	100.7	73.6	28.4
85°	20.4	20.8	75.4	169.8	226.6	231.1	61.7	34.6	57.7	45.7	14.7
87.5°	2.3	7.1	28.4	28.4	20.0	19.5	6.7	7.6	16.4	5.7	2.7
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°	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4	877.4
2.5°	879.1	879.6	873.8	864.1	853.4	844.6	833.4	824.6	818.4	816.6	819.7
5°	885.4	882.2	865.8	836.1	800.6	770.1	735.8	708.8	691.1	683.6	686.2
7.5°	894.7	885.8	849.8	791.3	723.4	663.2	601.9	554.4	524.3	509.2	511.5
10°	902.6	884.9	823.3	726.5	622.8	531.4	448.8	391.7	359.8	344.6	345.1
12.5°	910.2	884.5	788.6	649.8	509.2	397.4	320.7	292.3	283.4	280.3	279.4
15°	924.3	885.8	745.2	562.0	396.1	300.3	272.3	271.9	273.7	272.8	272.3
17.5°	943.9	887.1	696.0	468.8	305.7	264.9	263.5	267.4	270.1	268.8	268.3
20°	969.2	892.5	643.6	376.6	262.6	255.9	259.0	262.6	264.9	262.6	262.2
22.5°	1004.7	901.8	586.4	302.5	248.9	250.6	253.3	257.3	259.5	256.4	255.9
25°	1048.2	916.5	530.0	263.0	242.2	244.4	248.4	252.9	255.5	252.4	251.9
27.5°	1104.4	939.9	478.2	254.2	235.5	236.9	242.6	249.3	252.9	248.9	248.9
30°	1186.1	978.5	433.4	258.2	231.5	228.5	236.5	245.7	249.7	246.2	245.7
32.5°	1294.4	1033.1	405.9	264.3	229.8	218.6	226.2	238.2	244.9	242.6	242.6
35°	1436.2	1116.0	395.2	271.4	228.5	208.5	213.8	226.6	238.2	240.4	240.4
37.5°	1608.3	1231.3	398.3	274.6	224.5	200.1	202.7	213.8	228.9	236.0	237.8
40°	1804.0	1365.7	416.0	271.4	220.0	192.9	193.4	201.8	215.1	225.8	229.3
42.5°	2005.8	1522.7	448.8	259.9	216.0	186.8	185.4	191.2	200.1	207.6	210.7
45°	2197.9	1684.2	481.2	244.0	211.2	180.5	177.4	179.7	181.4	184.5	186.3
47.5°	2365.6	1797.7	471.9	229.3	204.5	173.4	168.1	167.2	162.0	161.4	161.0
50°	2481.3	1822.7	419.1	214.7	194.7	165.4	157.0	151.7	142.4	138.0	138.4
52.5°	2518.1	1724.6	342.5	200.1	178.8	154.8	142.8	134.4	122.9	118.9	118.4
55°	2469.3	1532.5	273.7	182.3	156.6	140.6	127.3	116.2	106.9	102.0	102.0
57.5°	2350.0	1288.1	216.5	161.4	133.0	124.6	111.3	100.2	92.2	87.4	86.5
60°	2152.2	1022.8	171.2	136.6	113.6	107.3	93.6	86.5	79.4	73.6	72.3
62.5°	1851.9	730.1	134.4	108.2	94.9	87.8	79.8	74.5	66.1	58.1	56.8
65°	1445.1	446.7	103.8	79.4	76.3	72.8	67.9	63.0	52.8	44.8	43.5
67.5°	911.5	211.6	74.1	59.9	60.4	58.5	56.4	52.4	44.8	37.7	36.8
70°	401.4	102.5	48.8	45.7	44.8	44.8	46.5	45.2	38.1	31.5	30.1
72.5°	136.6	55.0	36.4	34.6	32.4	32.0	39.1	37.7	30.6	24.4	23.1
75°	71.4	36.8	26.6	24.8	19.5	23.5	31.1	29.3	21.7	16.0	14.7
77.5°	46.5	26.1	18.1	16.0	11.1	15.5	23.1	20.4	12.8	8.0	7.1
80°	29.3	17.3	10.7	7.6	5.3	8.4	12.4	8.9	4.9	1.7	1.3
82.5°	15.5	8.9	4.0	2.7	2.3	2.7	3.1	2.3	0.9	0.0	0.0
85°	6.3	3.1	1.3	0.9	0.4	0.0	0.9	0.4	0.0	0.0	0.0
87.5°	2.3	0.4	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)