

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: P959834

Luminaire Tested: **NAV-SB1B-735-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959834
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-SB1B-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4371.6 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

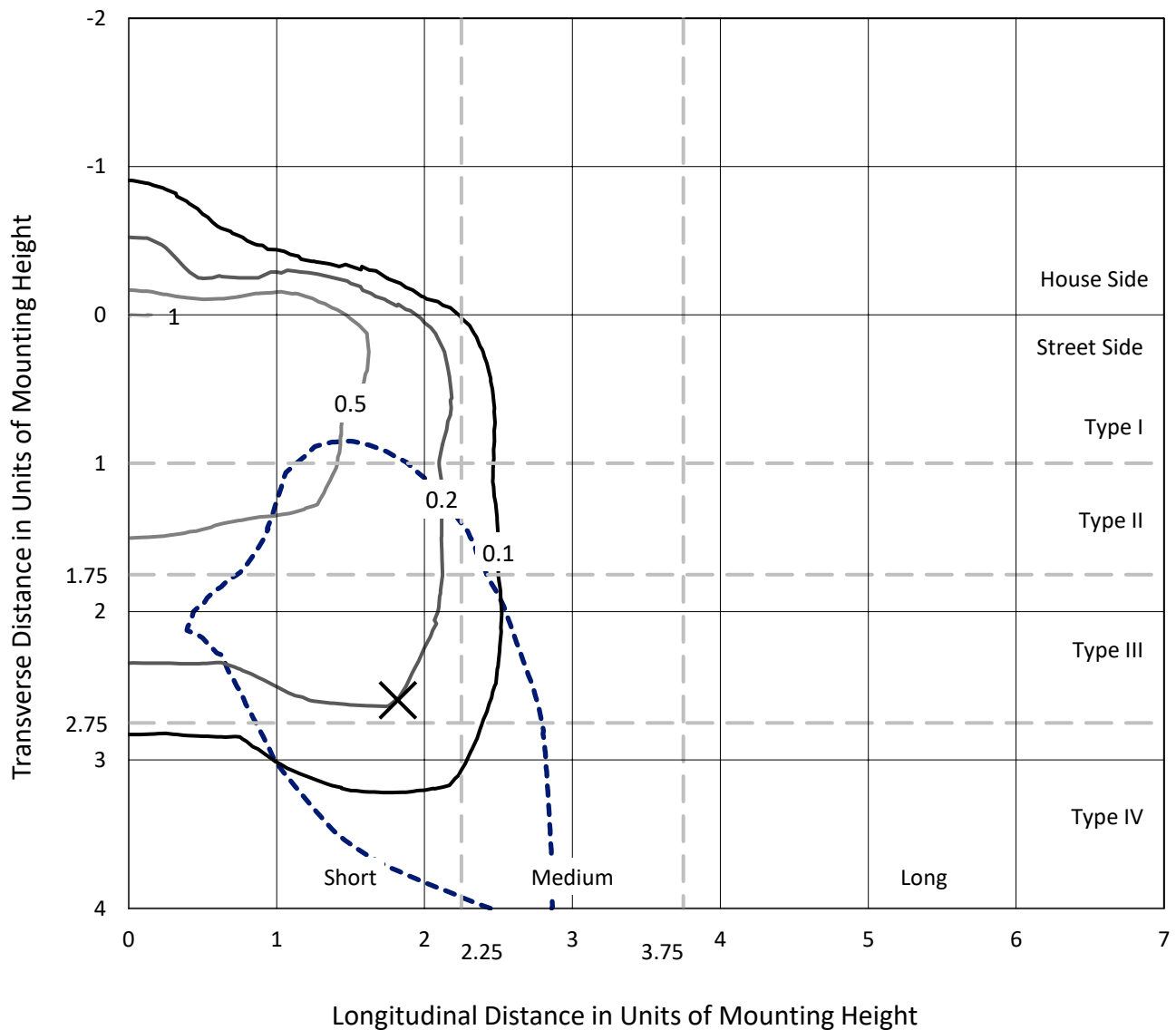
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

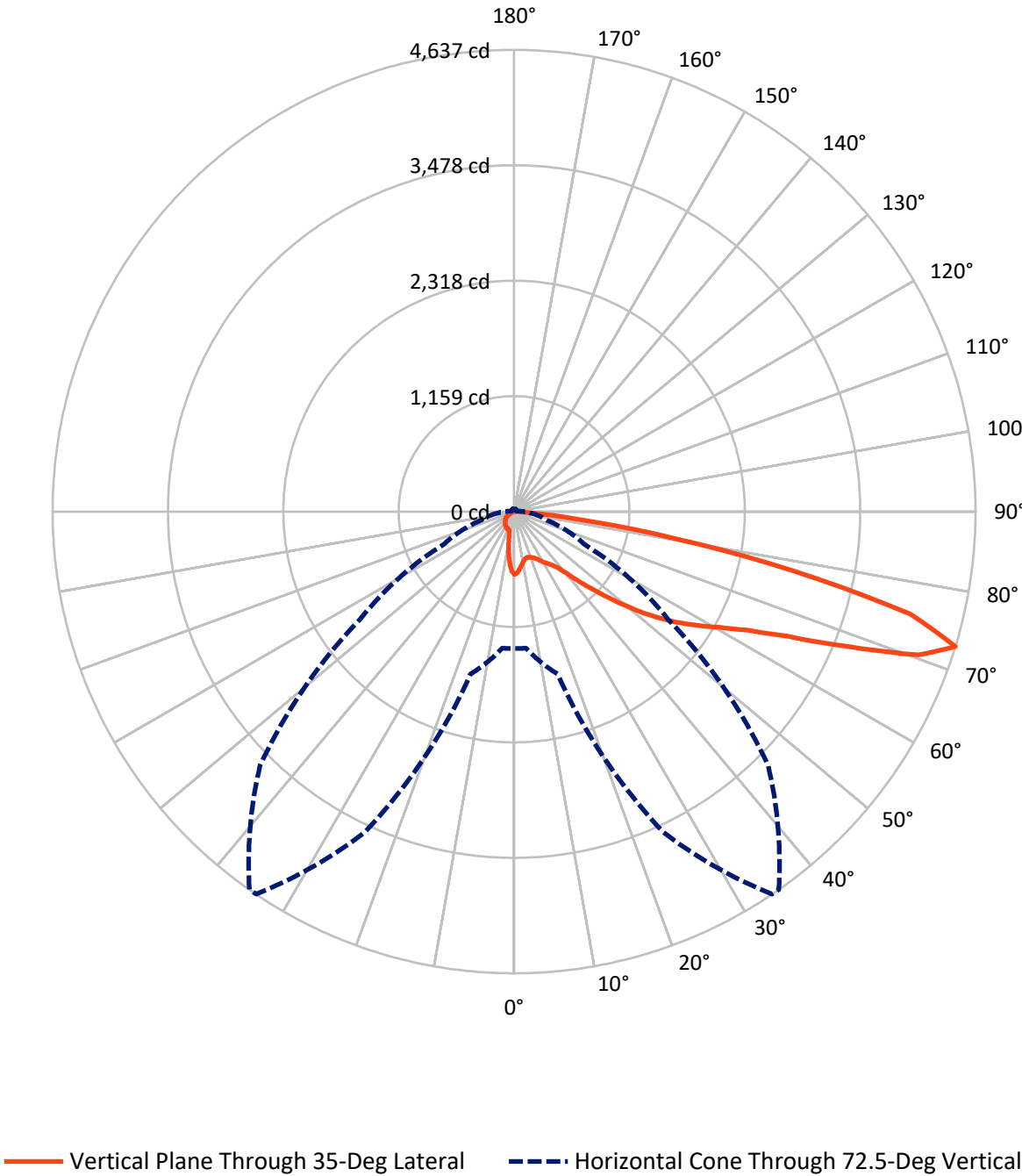
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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	492.0	0.0	492.0
	% Fixture	11.3	0.0	11.3
Street Side	Lumens	3879.6	0.0	3879.6
	% Fixture	88.7	0.0	88.7
Total	Lumens	4371.6	0.0	4371.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	1.2
10°-20°	121.8	2.8
20°-30°	197.9	4.5
30°-40°	330.1	7.6
40°-50°	624.6	14.3
50°-60°	992.5	22.7
60°-70°	1227.8	28.1
70°-80°	763.2	17.5
80°-90°	61.7	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°	4371.6	100.0
0°-180°	4371.6	100.0

Coefficient of Utilization



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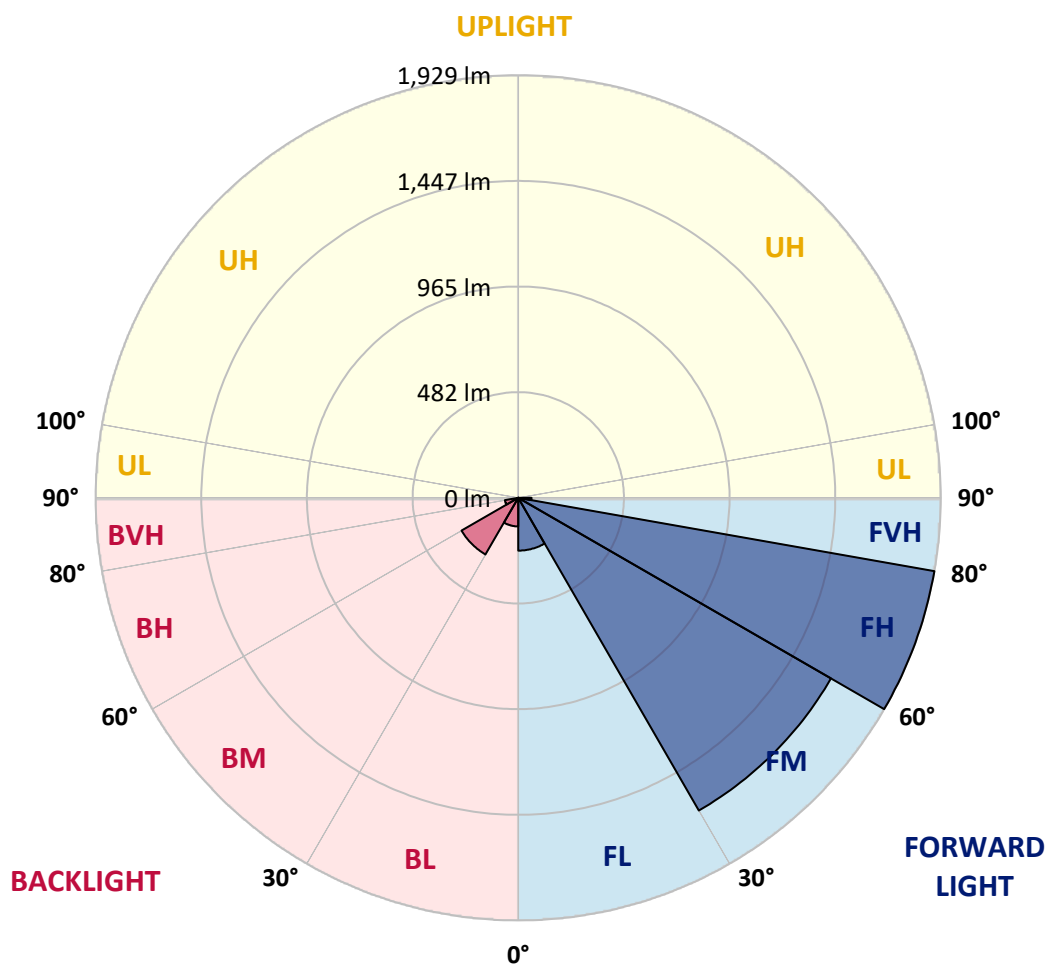
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	241.0	5.5			
FM	(30°-60°)	1648.5	37.7			
FH	(60°-80°)	1929.2	44.1			G2/5000
FVH	(80°-90°)	60.8	1.4			G1/100
BL	(0°-30°)	130.7	3.0	B1/500		
BM	(30°-60°)	298.7	6.8	B1/1000		
BH	(60°-80°)	61.8	1.4	B0/110		G0/110
BVH	(80°-90°)	0.8	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°	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
2.5°	605.4	610.5	611.5	613.1	613.1	615.0	618.2	622.7	630.1	634.0	636.5
5°	558.0	561.8	566.6	570.5	577.9	578.8	591.3	603.5	620.4	633.2	642.3
7.5°	510.2	514.8	521.2	530.4	540.1	542.9	561.8	582.3	609.3	633.2	648.3
10°	476.6	476.9	482.8	492.0	507.4	511.0	534.0	563.1	596.8	629.5	654.1
12.5°	457.8	460.0	462.6	469.6	484.3	486.6	511.3	545.5	584.2	627.2	660.8
15°	457.8	459.3	460.9	464.4	476.3	478.3	500.0	534.3	577.9	628.1	671.7
17.5°	462.6	465.1	463.8	468.0	480.5	481.7	501.0	531.1	577.6	634.3	688.4
20°	474.1	476.0	473.4	476.0	488.5	491.1	511.0	537.2	583.0	644.8	709.2
22.5°	492.3	493.3	487.2	489.1	501.9	505.1	528.2	554.5	596.1	661.7	737.1
25°	515.4	517.3	508.0	510.2	522.4	526.3	552.9	580.5	616.9	685.2	772.6
27.5°	542.0	542.9	534.9	534.6	550.3	555.8	582.7	612.4	644.8	714.6	817.4
30°	572.5	575.3	567.6	566.3	586.2	590.7	617.3	651.9	685.8	758.8	881.2
32.5°	596.4	598.7	594.2	597.4	617.6	621.2	659.2	707.6	750.2	821.6	968.0
35°	631.0	632.3	622.1	627.8	650.9	659.9	716.6	785.8	831.3	900.5	1081.4
37.5°	756.2	756.2	712.7	684.2	706.3	714.3	795.0	884.1	931.2	1006.1	1224.3
40°	929.6	926.7	862.9	804.6	801.8	817.4	906.8	1008.1	1060.3	1132.9	1385.1
42.5°	1114.4	1109.9	1023.2	965.4	955.8	961.2	1036.0	1160.8	1214.0	1287.7	1558.0
45°	1278.4	1277.1	1197.7	1120.1	1102.9	1120.1	1197.0	1339.6	1377.7	1455.2	1730.7
47.5°	1415.8	1415.8	1357.8	1307.2	1298.3	1308.5	1415.2	1537.9	1534.3	1633.6	1898.8
50°	1574.1	1572.8	1517.7	1495.9	1505.2	1519.6	1666.3	1746.7	1696.4	1808.8	2049.1
52.5°	1684.9	1692.6	1673.7	1670.1	1717.6	1742.5	1921.3	1951.1	1841.5	1975.1	2161.5
55°	1772.6	1781.7	1803.4	1828.1	1919.3	1952.0	2168.3	2144.9	1963.0	2119.3	2226.2
57.5°	1897.0	1884.2	1917.8	1966.5	2114.2	2153.5	2407.5	2327.8	2060.7	2236.1	2233.3
60°	2047.8	2049.7	2055.5	2117.0	2308.5	2359.1	2643.3	2500.8	2123.4	2307.9	2155.2
62.5°	2229.1	2232.0	2243.8	2338.3	2569.6	2617.3	2894.4	2642.3	2152.2	2287.7	1953.3
65°	2216.7	2228.8	2361.1	2684.3	2966.5	3013.6	3187.5	2741.7	2108.6	2103.2	1590.4
67.5°	2019.4	2039.1	2260.5	3097.5	3564.8	3617.4	3541.8	2761.1	1920.6	1635.6	1037.5
70°	1760.4	1767.5	2033.7	3469.1	4257.7	4310.8	3858.9	2546.2	1457.4	912.2	464.7
72.5°	1374.8	1376.4	1688.7	3555.2	4633.7	4636.7	3610.0	1890.2	783.8	350.4	161.4
75°	982.2	972.5	1131.1	2883.2	4076.7	4109.4	2706.4	886.6	299.5	165.6	80.4
77.5°	526.6	537.2	640.0	1709.9	2816.3	2871.9	1476.7	255.6	152.5	112.7	53.2
80°	162.8	171.7	262.3	782.9	1595.2	1628.8	547.5	113.7	106.4	80.4	35.0
82.5°	51.2	53.2	122.4	328.9	662.2	677.5	158.6	64.4	72.7	53.2	20.5
85°	14.8	15.1	54.4	122.7	163.7	166.9	44.5	25.0	41.6	33.0	10.6
87.5°	1.6	5.1	20.5	20.5	14.5	14.1	4.8	5.4	11.9	4.2	1.9
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°	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
2.5°	634.9	635.2	631.0	624.0	616.3	609.9	601.9	595.5	591.0	589.7	591.9
5°	639.4	637.1	625.2	603.8	578.2	556.1	531.5	511.9	499.1	493.6	495.6
7.5°	646.1	639.7	613.8	571.4	522.4	478.9	434.7	400.4	378.6	367.8	369.3
10°	651.9	639.1	594.5	524.7	449.8	383.8	324.2	282.8	259.7	248.9	249.2
12.5°	657.3	638.7	569.5	469.2	367.8	287.0	231.5	211.0	204.7	202.4	201.8
15°	667.6	639.7	538.1	405.8	286.1	216.9	196.7	196.4	197.6	197.0	196.7
17.5°	681.6	640.6	502.6	338.6	220.7	191.3	190.2	193.1	195.1	194.1	193.8
20°	699.9	644.5	464.7	271.9	189.6	184.8	187.1	189.6	191.3	189.6	189.3
22.5°	725.5	651.2	423.4	218.4	179.7	181.0	182.9	185.8	187.4	185.1	184.8
25°	757.0	661.7	382.7	189.9	174.9	176.5	179.4	182.6	184.5	182.2	181.9
27.5°	797.6	678.8	345.3	183.6	170.0	171.1	175.2	180.0	182.6	179.7	179.7
30°	856.5	706.6	312.9	186.4	167.2	164.9	170.8	177.4	180.3	177.7	177.4
32.5°	934.7	746.0	293.0	191.0	165.9	158.0	163.4	172.0	176.8	175.2	175.2
35°	1037.2	806.0	285.4	196.1	164.9	150.6	154.4	163.7	172.0	173.6	173.6
37.5°	1161.5	889.2	287.6	198.2	162.1	144.4	146.4	154.4	165.3	170.5	171.7
40°	1302.8	986.3	300.4	196.1	158.9	139.3	139.7	145.8	155.4	163.1	165.6
42.5°	1448.5	1099.6	324.2	187.7	156.0	134.9	133.9	138.1	144.4	150.0	152.1
45°	1587.2	1216.3	347.6	176.2	152.5	130.4	128.1	129.8	131.0	133.2	134.6
47.5°	1708.3	1298.3	340.8	165.6	147.7	125.3	121.4	120.7	117.0	116.6	116.2
50°	1791.9	1316.2	302.7	155.1	140.6	119.5	113.4	109.6	102.8	99.6	99.9
52.5°	1818.5	1245.4	247.3	144.4	129.0	111.8	103.1	97.1	88.8	85.9	85.5
55°	1783.2	1106.7	197.6	131.6	113.1	101.6	91.9	83.9	77.2	73.7	73.7
57.5°	1697.1	930.2	156.3	116.6	96.1	90.0	80.4	72.4	66.6	63.1	62.4
60°	1554.2	738.6	123.6	98.7	82.0	77.5	67.5	62.4	57.3	53.2	52.2
62.5°	1337.3	527.3	97.1	78.2	68.6	63.4	57.7	53.8	47.8	41.9	41.0
65°	1043.7	322.6	74.9	57.3	55.1	52.6	49.0	45.5	38.1	32.4	31.4
67.5°	658.3	152.8	53.5	43.3	43.6	42.3	40.7	37.8	32.4	27.3	26.5
70°	289.9	74.0	35.3	33.0	32.4	32.4	33.6	32.7	27.6	22.8	21.8
72.5°	98.7	39.8	26.2	25.0	23.4	23.1	28.2	27.3	22.1	17.6	16.7
75°	51.6	26.5	19.3	17.9	14.1	17.0	22.4	21.1	15.7	11.6	10.6
77.5°	33.6	18.9	13.1	11.6	8.0	11.2	16.7	14.8	9.3	5.7	5.1
80°	21.1	12.5	7.7	5.4	3.9	6.0	9.0	6.5	3.5	1.3	0.9
82.5°	11.2	6.5	2.9	1.9	1.6	1.9	2.3	1.6	0.6	0.0	0.0
85°	4.5	2.3	0.9	0.6	0.3	0.0	0.6	0.3	0.0	0.0	0.0
87.5°	1.6	0.3	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)