

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: P959837

Luminaire Tested: **NAV-SB1B-735-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959837
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-735-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5762.5 lumens
Efficiency: N/A
Efficacy: 144.8 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

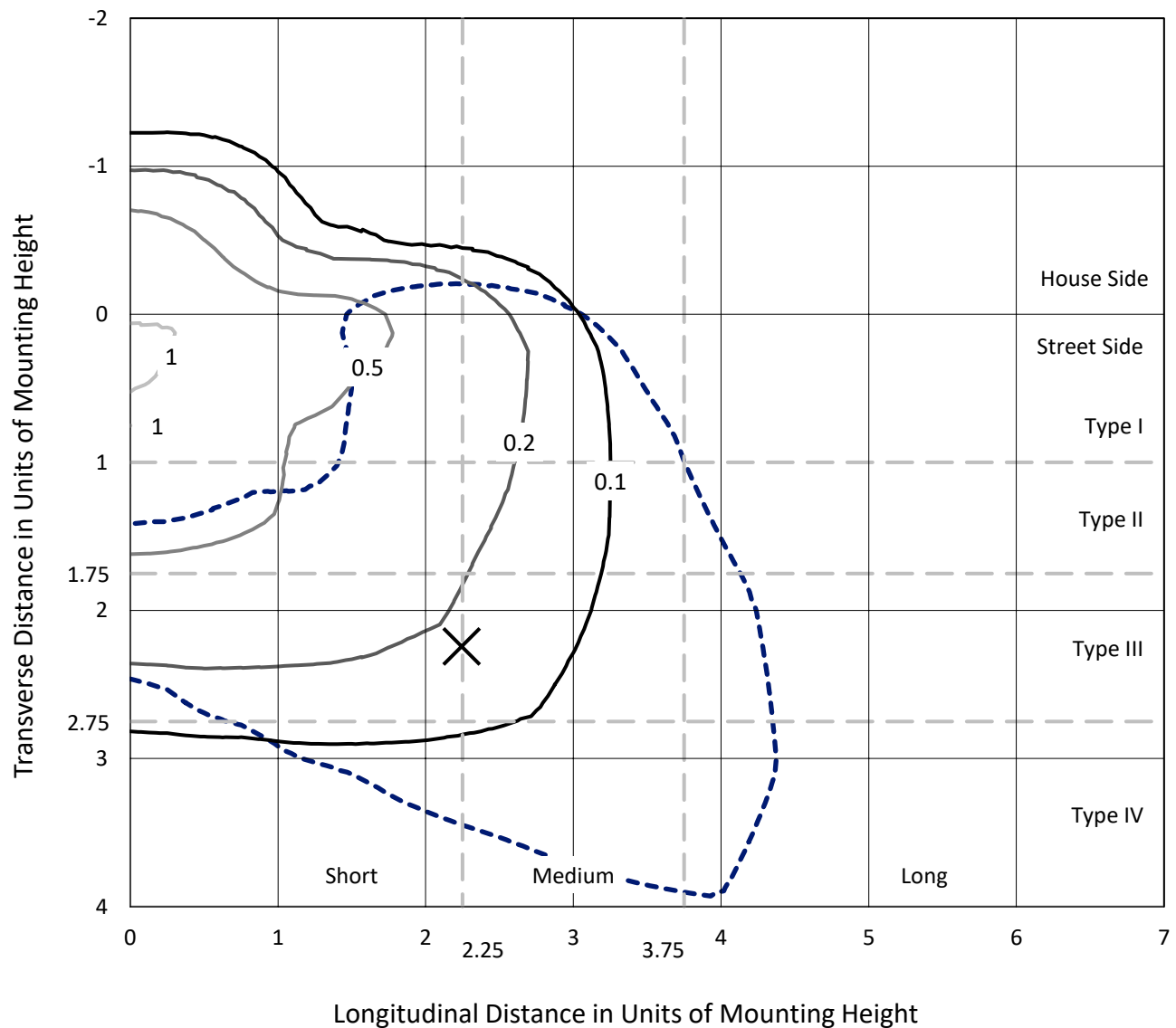


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Iso-Footcandle Lines of Horizontal Illumination

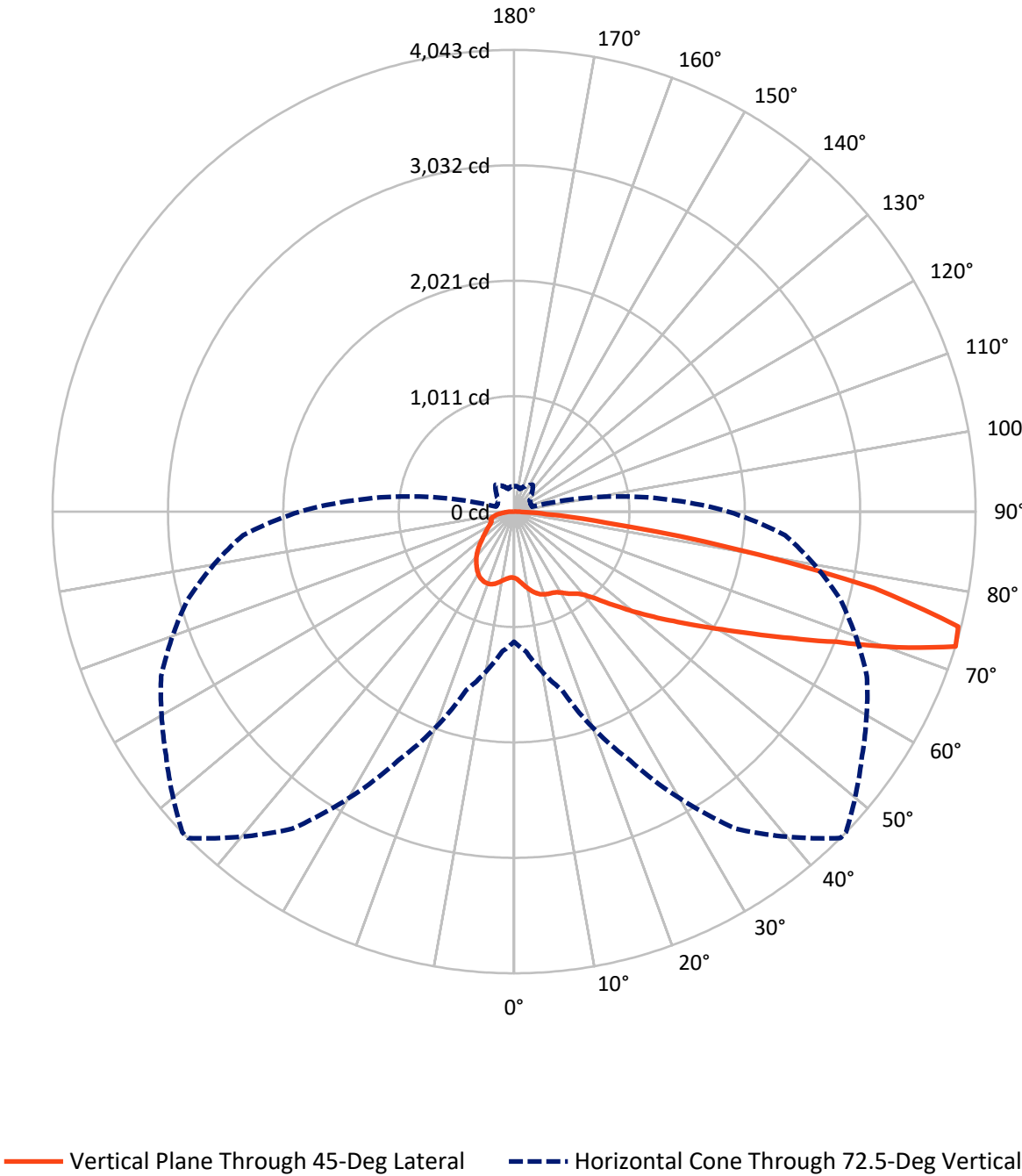
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 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	1302.7	0.0	1302.7
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	4459.8	0.0	4459.8
	% Fixture	77.4	0.0	77.4
Total	Lumens	5762.5	0.0	5762.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	1.0
10°-20°	197.3	3.4
20°-30°	343.2	6.0
30°-40°	492.0	8.5
40°-50°	692.7	12.0
50°-60°	1061.0	18.4
60°-70°	1537.0	26.7
70°-80°	1227.4	21.3
80°-90°	152.9	2.7
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°	5762.5	100.0
0°-180°	5762.5	100.0

Coefficient of Utilization



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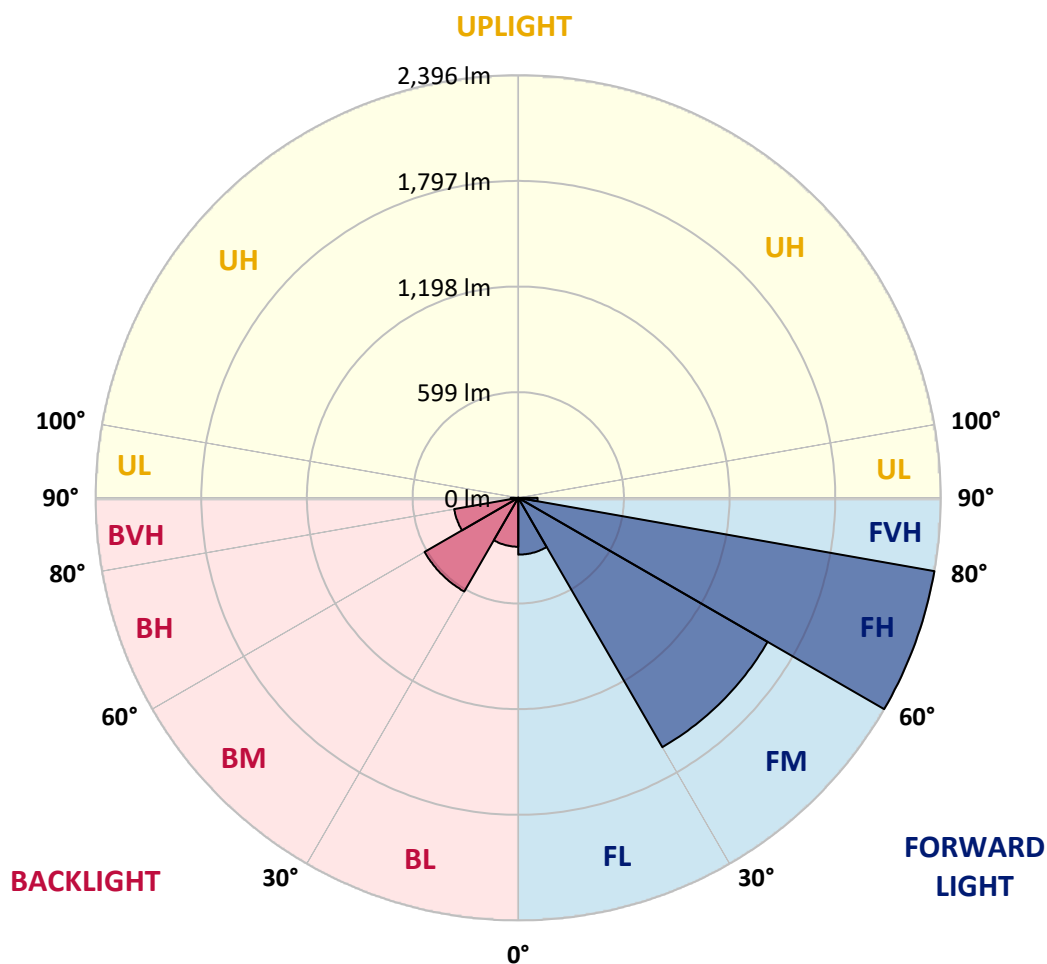
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	322.2	5.6			
FM	(30°-60°)	1632.3	28.3			
FH	(60°-80°)	2395.7	41.6			G2/5000
FVH	(80°-90°)	109.7	1.9			G2/225
BL	(0°-30°)	277.4	4.8	B1/500		
BM	(30°-60°)	613.4	10.6	B1/1000		
BH	(60°-80°)	368.8	6.4	B1/500		G1/500
BVH	(80°-90°)	43.2	0.7			G1/100
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°	35°	45°	46°	55°	65°	75°	85°
0°	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4
2.5°	604.1	608.0	604.4	601.1	599.5	595.6	595.3	592.9	591.3	587.1	585.9
5°	646.3	651.5	645.3	638.7	632.6	622.9	621.7	614.7	606.8	597.7	592.6
7.5°	693.9	698.5	691.6	681.5	670.9	654.8	654.5	641.8	629.2	613.8	605.1
10°	735.5	741.6	732.2	718.5	705.2	687.0	684.8	670.2	654.5	634.5	621.0
12.5°	772.2	776.5	767.4	750.7	735.2	717.0	714.3	698.2	680.6	657.8	640.8
15°	801.4	806.9	794.8	776.8	760.4	742.5	740.0	725.5	707.9	684.0	662.0
17.5°	820.5	825.1	812.6	792.6	776.8	762.0	760.1	747.9	732.5	708.2	684.8
20°	827.8	832.7	819.6	799.3	784.7	773.2	772.2	763.4	752.9	730.7	707.0
22.5°	835.1	839.7	822.7	801.4	788.6	781.4	781.0	775.3	771.1	752.9	729.8
25°	864.6	865.8	843.0	812.3	794.2	787.7	787.4	787.1	788.9	774.7	754.4
27.5°	890.0	889.8	870.3	841.5	813.2	799.9	799.6	802.7	808.4	796.5	779.8
30°	927.4	924.0	901.0	870.9	845.1	824.5	822.7	819.9	824.5	815.1	805.3
32.5°	1006.7	996.0	958.7	905.3	871.6	855.8	853.3	836.3	838.1	832.4	827.5
35°	1120.1	1106.2	1056.4	970.2	904.4	881.9	880.7	859.1	855.5	850.2	852.1
37.5°	1255.2	1237.9	1180.0	1064.3	960.8	912.2	910.4	890.9	876.1	870.6	881.0
40°	1390.9	1369.1	1321.1	1179.1	1044.0	962.9	957.1	927.7	910.7	901.6	923.4
42.5°	1522.6	1504.5	1463.5	1307.8	1146.6	1037.0	1024.3	973.9	961.0	952.6	992.1
45°	1639.3	1622.9	1592.8	1445.2	1266.8	1137.8	1125.3	1043.0	1039.1	1039.1	1096.1
47.5°	1734.0	1730.3	1698.4	1585.6	1408.6	1252.6	1230.9	1139.3	1149.9	1166.3	1244.0
50°	1839.0	1829.0	1795.0	1723.6	1575.2	1384.0	1366.3	1257.4	1297.1	1342.0	1457.8
52.5°	1935.5	1941.0	1903.0	1867.5	1763.4	1530.5	1499.6	1396.7	1482.7	1557.0	1708.2
55°	2034.8	2035.1	2024.5	2019.7	1960.7	1692.7	1658.7	1564.3	1700.9	1793.1	2000.2
57.5°	2128.0	2128.6	2144.4	2187.1	2189.6	1879.6	1841.1	1770.1	1943.4	2037.5	2301.3
60°	2211.1	2215.4	2258.5	2358.7	2390.9	2094.0	2057.6	2013.2	2194.2	2288.9	2618.0
62.5°	2239.1	2254.6	2350.5	2492.9	2589.8	2356.9	2321.1	2294.7	2457.6	2545.7	2882.7
65°	2191.8	2227.2	2412.7	2603.7	2794.4	2669.3	2633.7	2604.9	2731.5	2814.3	3100.0
67.5°	2075.5	2121.3	2409.1	2719.9	3042.6	3045.1	3012.0	2944.3	3025.1	3057.0	3170.7
70°	1769.2	1837.8	2196.9	2763.4	3327.7	3559.0	3527.1	3352.9	3318.0	3163.8	2971.6
72.5°	1139.9	1232.2	1617.7	2406.1	3391.1	4042.6	4040.8	3721.7	3410.6	2956.1	2383.3
75°	415.8	472.3	751.6	1510.2	2846.5	4018.0	4029.9	3658.5	3113.3	2283.4	1484.7
77.5°	151.5	165.7	245.3	580.5	1750.7	3223.8	3248.4	2924.8	2216.0	1145.9	588.3
80°	79.5	87.4	125.7	225.3	750.1	1914.6	1953.1	1738.2	1041.5	345.1	176.4
82.5°	44.0	47.7	70.4	122.4	337.8	818.7	841.8	686.6	366.4	146.4	72.9
85°	23.7	25.2	33.1	66.8	165.1	283.8	290.2	205.2	146.1	85.9	35.3
87.5°	7.0	8.5	11.0	21.2	64.7	63.8	65.3	40.7	57.7	43.5	11.6
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°	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4	581.4
2.5°	584.0	583.1	579.8	578.3	576.5	576.2	577.7	578.0	578.3	578.6	579.8
5°	589.5	586.5	583.4	581.6	582.2	582.5	585.6	587.7	589.3	590.4	591.0
7.5°	600.1	597.7	592.6	592.2	593.2	595.9	599.8	604.8	607.4	609.6	610.2
10°	615.9	611.4	605.3	606.2	608.0	612.0	620.2	624.1	628.7	632.6	631.7
12.5°	632.0	628.1	621.0	621.7	624.7	631.7	639.6	644.5	647.5	650.6	651.8
15°	652.9	646.0	638.4	638.4	643.9	651.5	655.1	659.1	660.8	664.2	665.4
17.5°	674.6	665.4	655.4	654.8	661.4	665.1	667.3	667.9	668.4	672.1	673.3
20°	696.1	686.0	671.8	670.6	672.1	671.5	671.2	670.6	671.5	676.1	677.8
22.5°	717.3	705.8	686.0	680.6	676.3	670.6	670.2	669.9	670.6	675.2	678.1
25°	742.2	728.3	701.8	685.4	671.2	663.3	664.2	664.5	665.1	668.7	673.6
27.5°	769.3	753.8	716.4	684.0	658.2	652.6	651.2	652.1	654.2	660.0	665.7
30°	796.2	778.1	729.8	677.8	641.8	634.2	629.2	631.4	638.1	643.9	650.3
32.5°	820.8	802.7	740.4	664.5	620.8	609.0	602.6	605.3	612.0	614.1	621.7
35°	849.7	829.0	745.0	643.3	598.0	579.8	571.3	567.3	570.7	568.6	575.2
37.5°	881.9	860.3	744.4	615.3	571.3	550.3	538.5	523.7	516.7	509.4	513.9
40°	929.5	898.5	737.1	581.6	538.2	519.1	497.8	472.6	456.8	442.6	443.5
42.5°	994.5	951.7	723.8	544.6	500.9	483.0	454.2	424.7	399.7	376.1	374.0
45°	1091.3	1021.2	707.0	505.1	460.5	442.9	411.6	378.5	350.3	320.0	316.3
47.5°	1230.9	1114.7	691.3	460.2	418.0	401.9	373.7	343.1	309.7	280.2	276.9
50°	1422.8	1248.9	676.6	416.5	376.1	364.0	341.5	310.3	276.5	252.9	251.3
52.5°	1666.9	1431.3	670.6	374.3	336.9	332.4	314.5	285.4	253.5	233.4	232.0
55°	1947.1	1649.5	670.6	333.9	302.7	304.2	291.7	264.8	237.1	219.1	217.4
57.5°	2233.1	1870.6	658.5	296.6	273.5	279.9	272.0	248.4	223.4	204.9	201.8
60°	2496.5	2055.7	609.3	262.6	247.7	257.7	252.6	232.3	201.8	186.3	184.0
62.5°	2699.0	2160.2	514.6	235.5	226.4	238.0	235.2	210.9	197.9	191.6	189.4
65°	2800.4	2143.2	393.4	211.6	208.6	226.4	220.7	219.8	209.5	202.1	199.8
67.5°	2738.2	1996.9	285.4	193.9	198.2	215.9	238.0	241.6	222.5	208.3	205.8
70°	2465.2	1732.1	212.5	177.3	185.2	216.2	271.4	252.9	218.2	201.6	198.8
72.5°	1875.4	1291.7	164.8	159.7	168.2	217.6	286.3	247.7	206.1	222.8	221.0
75°	1072.5	709.1	132.3	138.2	146.9	203.4	278.7	234.3	196.7	204.6	204.6
77.5°	408.9	272.6	109.3	116.8	118.1	177.6	266.5	233.4	187.3	182.8	166.7
80°	141.8	106.6	90.5	92.9	91.3	157.8	255.6	203.1	153.3	137.2	132.6
82.5°	58.0	53.1	71.6	68.6	65.0	122.6	206.4	166.0	125.4	110.8	109.6
85°	25.2	33.7	47.4	41.6	37.6	85.0	165.4	140.5	106.0	91.3	91.0
87.5°	5.1	12.7	20.0	18.9	19.5	56.8	117.5	99.8	75.0	56.2	44.0
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)