

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: P959973

Luminaire Tested: **NAV-SB1B-830-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5142.4 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

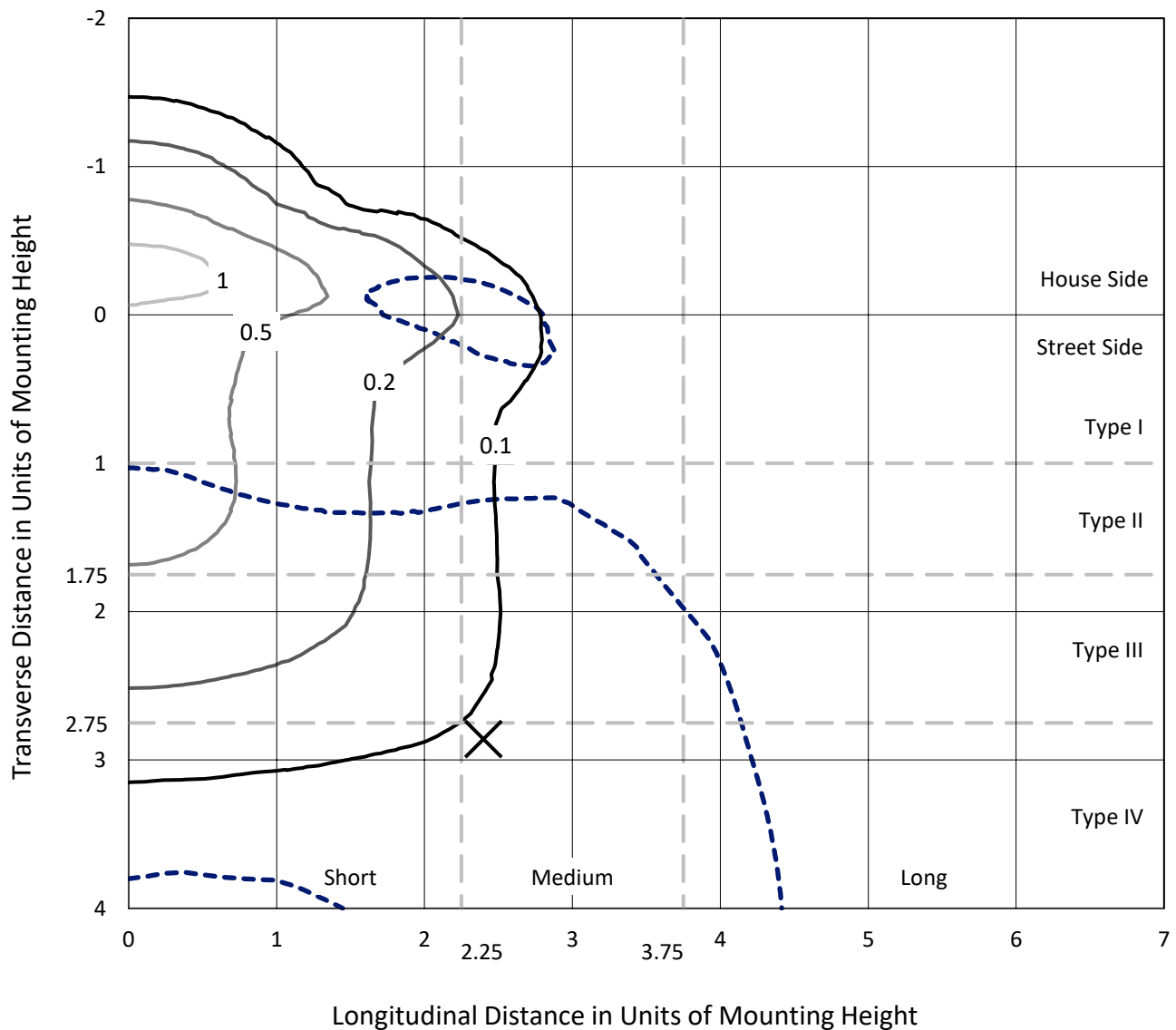
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

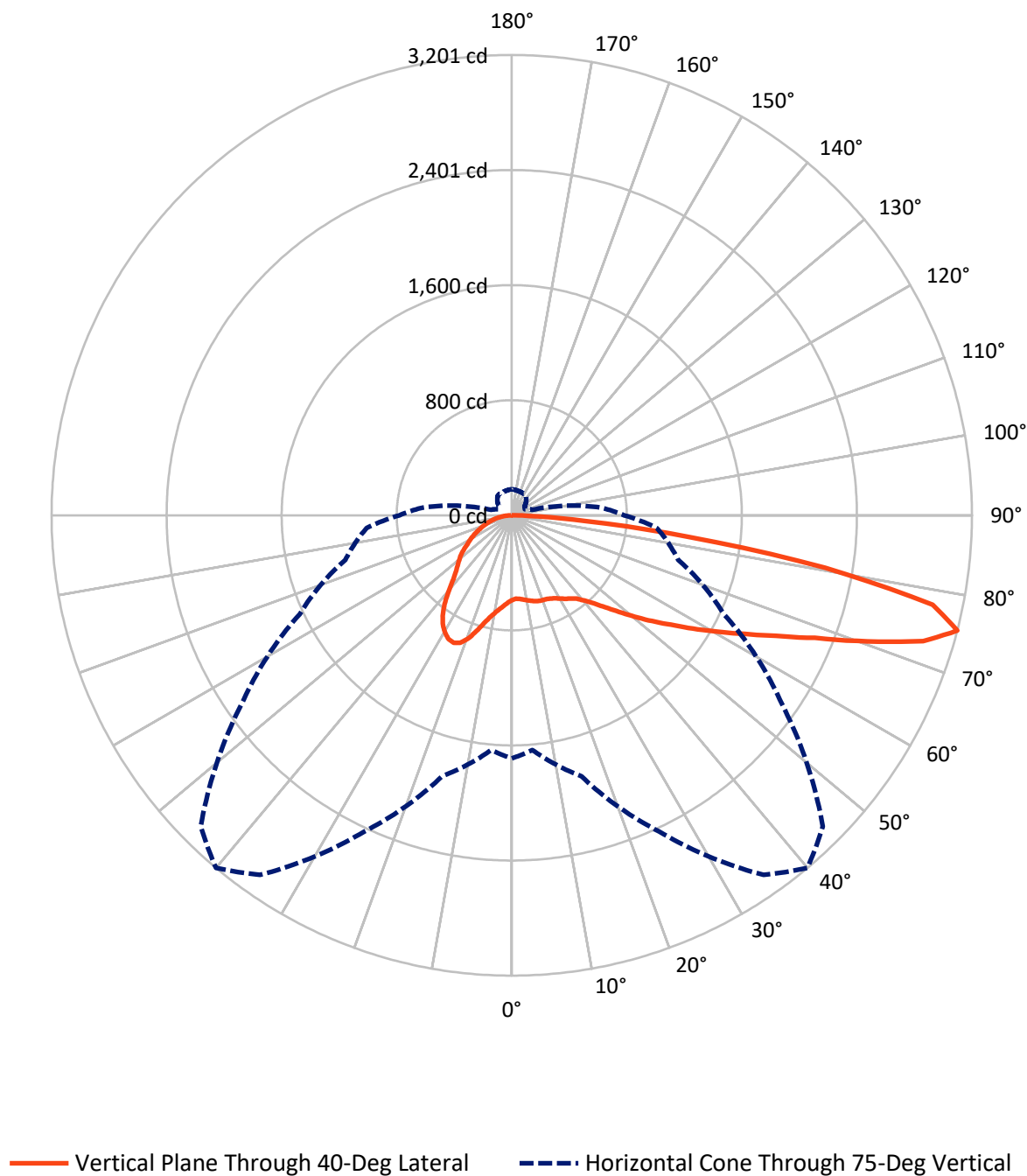
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1593.3	0.0	1593.3
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3549.1	0.0	3549.1
	% Fixture	69.0	0.0	69.0
Total	Lumens	5142.4	0.0	5142.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	1.1
10°-20°	197.1	3.8
20°-30°	359.8	7.0
30°-40°	510.4	9.9
40°-50°	689.1	13.4
50°-60°	927.1	18.0
60°-70°	1176.7	22.9
70°-80°	1067.9	20.8
80°-90°	155.7	3.0
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°	5142.4	100.0
0°-180°	5142.4	100.0

Coefficient of Utilization



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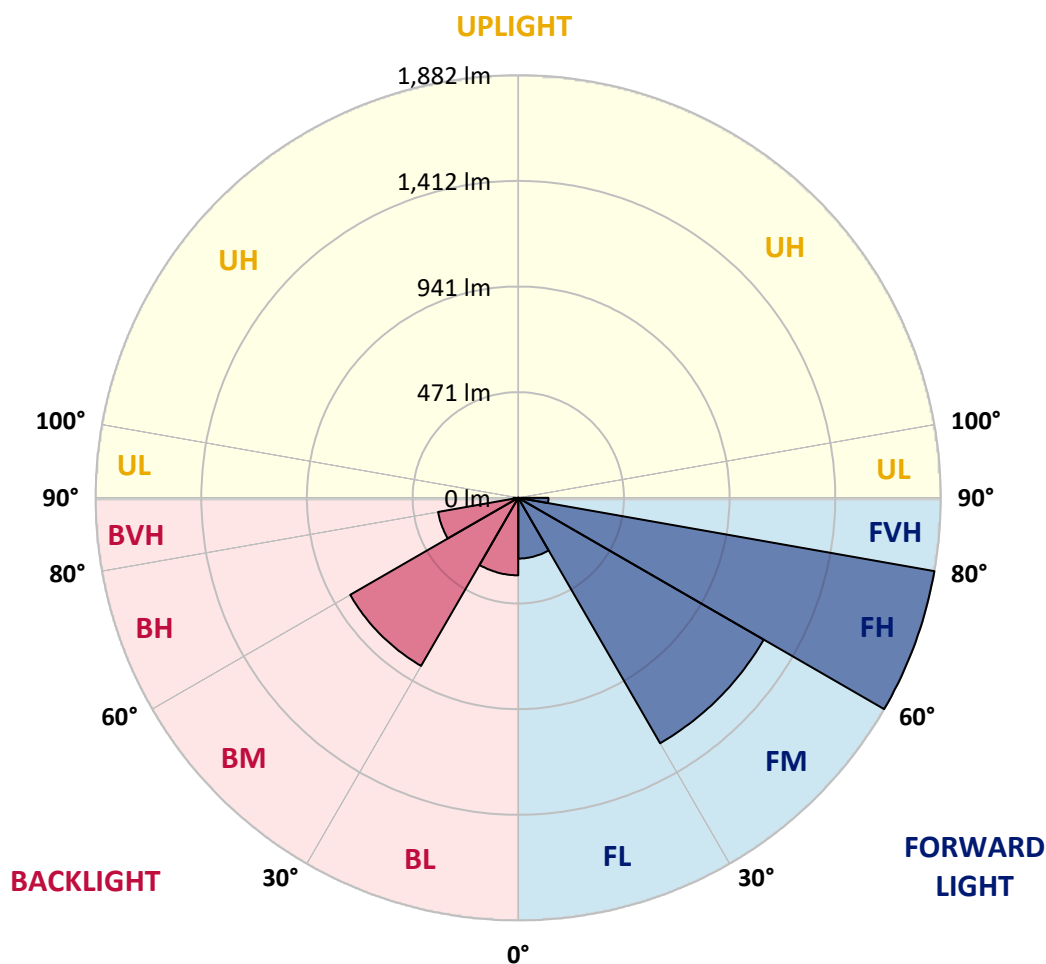
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	270.5	5.3			
FM	(30°-60°)	1262.3	24.5			
FH	(60°-80°)	1882.0	36.6			G2/5000
FVH	(80°-90°)	134.2	2.6			G2/225
BL	(0°-30°)	345.1	6.7	B1/500		
BM	(30°-60°)	864.2	16.8	B1/1000		
BH	(60°-80°)	362.5	7.0	B1/500		G1/500
BVH	(80°-90°)	21.4	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0
2.5°	579.0	582.3	581.5	580.4	580.4	580.7	580.4	582.3	584.2	586.1	589.2
5°	585.1	588.3	586.7	585.3	584.2	583.9	583.1	582.8	583.9	586.4	590.5
7.5°	596.8	600.0	597.6	595.1	593.0	591.8	590.8	589.2	588.3	589.7	595.4
10°	609.9	613.2	610.2	605.8	602.2	600.9	599.7	598.1	597.1	597.9	604.1
12.5°	623.0	626.3	622.2	616.1	611.5	610.7	609.4	608.7	608.5	608.2	614.5
15°	635.2	638.0	632.7	625.7	620.7	619.4	618.1	618.9	620.2	621.9	628.9
17.5°	644.7	647.5	639.9	630.6	626.0	625.5	624.6	627.3	631.1	635.2	644.0
20°	653.5	656.2	646.4	633.9	628.4	628.4	628.6	634.4	639.9	645.9	657.8
22.5°	665.7	668.0	656.0	638.8	630.9	631.4	633.6	639.3	646.2	654.4	671.0
25°	684.1	685.7	671.0	648.0	639.1	640.7	642.6	645.3	651.9	661.4	683.8
27.5°	713.5	714.8	695.5	664.4	650.8	653.5	656.2	654.4	657.3	665.5	694.1
30°	755.0	755.7	731.2	690.0	670.7	672.1	672.6	664.7	659.0	665.5	701.5
32.5°	804.0	803.8	774.6	721.2	693.3	692.0	687.4	671.8	658.5	664.1	708.1
35°	880.2	877.2	839.5	764.8	718.9	710.5	699.6	679.7	661.1	662.8	713.8
37.5°	1006.1	996.9	944.8	836.2	757.2	735.6	719.6	692.5	667.2	662.3	720.6
40°	1148.3	1136.5	1079.2	934.2	814.5	779.8	753.9	710.7	676.9	664.7	730.7
42.5°	1316.8	1300.2	1238.5	1049.5	886.9	836.8	797.8	734.0	691.5	672.6	744.4
45°	1523.9	1501.7	1414.5	1179.7	978.4	911.5	859.5	769.2	713.5	687.9	764.8
47.5°	1733.1	1738.5	1614.4	1328.5	1088.0	1003.7	936.6	822.0	745.7	712.4	797.8
50°	1955.3	1959.2	1813.2	1493.5	1212.4	1107.9	1023.4	881.3	790.4	747.3	847.2
52.5°	2128.8	2129.3	1993.8	1666.2	1341.9	1222.4	1116.9	948.8	842.2	793.7	912.9
55°	2237.4	2235.9	2120.3	1829.6	1490.9	1342.7	1220.6	1025.8	905.5	848.3	995.5
57.5°	2316.2	2312.1	2207.6	1970.0	1649.5	1484.8	1337.8	1113.0	980.2	913.2	1104.3
60°	2346.1	2343.8	2266.8	2091.4	1816.5	1641.9	1473.1	1210.7	1065.1	989.8	1244.2
62.5°	2357.6	2362.2	2324.9	2209.0	1995.2	1816.0	1621.8	1327.5	1160.5	1076.6	1391.8
65°	2398.0	2406.5	2398.8	2362.8	2197.0	2019.7	1819.0	1466.3	1264.7	1169.5	1545.9
67.5°	2477.9	2486.3	2489.6	2546.9	2443.5	2273.7	2065.0	1639.2	1386.6	1266.1	1661.8
70°	2476.0	2473.5	2531.3	2693.4	2752.3	2625.2	2396.7	1852.0	1532.1	1346.2	1676.6
72.5°	2253.7	2234.1	2370.7	2691.8	3009.2	2992.3	2801.6	2126.4	1657.5	1356.1	1454.9
75°	1690.7	1638.4	1879.7	2425.8	3052.0	3200.7	3059.1	2296.5	1627.8	1198.2	1012.4
77.5°	723.0	670.5	954.9	1795.8	2731.5	2992.1	2823.0	2003.6	1299.4	792.3	497.2
80°	189.3	189.0	288.5	814.2	1857.7	2209.5	1938.4	1294.0	742.4	283.1	137.1
82.5°	78.3	76.4	106.1	316.6	907.7	1239.9	1011.9	577.2	268.1	76.7	45.5
85°	29.2	28.9	51.6	109.4	320.2	511.4	370.1	147.6	66.8	37.4	20.5
87.5°	8.2	7.9	11.2	37.9	78.0	118.4	63.2	24.3	18.9	14.8	6.0
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°	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0	588.0
2.5°	590.0	591.3	593.8	595.7	598.1	600.9	604.6	607.1	609.6	611.2	610.2
5°	592.4	595.4	601.7	607.9	615.3	622.2	630.1	635.8	640.4	641.8	642.4
7.5°	597.9	602.8	613.4	624.0	635.8	647.0	658.5	668.2	676.1	679.2	679.4
10°	607.4	614.0	628.9	644.0	659.5	676.7	691.5	705.6	716.8	721.4	721.7
12.5°	619.4	627.6	647.2	668.0	689.5	713.2	732.4	749.8	763.7	770.0	770.0
15°	635.0	645.5	670.7	698.5	730.1	763.1	787.4	806.8	822.4	829.9	829.4
17.5°	651.9	666.0	697.7	739.6	784.9	828.3	856.7	870.8	886.9	894.3	894.1
20°	668.2	685.7	730.9	792.0	852.3	898.4	921.4	925.2	926.3	927.1	929.3
22.5°	685.1	708.6	772.6	858.0	922.7	954.6	957.9	941.6	918.6	907.9	911.0
25°	703.7	734.8	827.3	930.9	983.3	987.1	962.0	922.2	878.8	858.8	861.9
27.5°	721.7	765.1	892.7	1000.4	1026.8	993.3	939.3	882.8	830.6	809.5	812.0
30°	739.6	799.7	964.9	1061.3	1046.8	977.8	903.6	840.6	787.9	765.9	768.3
32.5°	758.0	840.1	1048.2	1105.2	1043.2	944.8	859.2	793.1	746.8	723.5	726.6
35°	778.7	889.7	1127.0	1129.1	1019.6	896.3	800.5	736.5	696.1	677.5	681.6
37.5°	805.6	952.7	1196.6	1135.2	978.1	825.0	727.6	669.3	636.0	627.6	633.6
40°	839.3	1028.5	1249.7	1125.7	916.7	738.6	648.0	601.4	582.6	584.5	591.0
42.5°	882.8	1113.4	1287.1	1101.1	831.4	649.4	578.2	557.5	566.5	574.1	581.2
45°	939.6	1201.4	1310.3	1059.3	734.8	573.9	537.0	541.9	548.8	549.6	555.0
47.5°	1012.2	1290.7	1325.5	996.3	636.3	520.7	510.9	512.0	510.6	504.8	509.2
50°	1102.7	1377.4	1339.2	912.9	552.6	487.4	474.3	470.5	451.7	433.2	435.6
52.5°	1205.8	1457.0	1344.9	809.2	487.4	459.6	438.3	414.3	379.1	373.4	375.3
55°	1320.4	1530.6	1330.1	681.8	432.6	423.8	391.7	362.7	359.0	354.0	354.9
57.5°	1457.2	1610.1	1300.2	539.8	376.4	382.1	350.8	354.0	347.2	339.6	338.2
60°	1607.0	1692.2	1247.5	410.2	318.3	330.0	340.1	339.9	337.9	331.7	329.4
62.5°	1741.8	1746.1	1143.9	314.2	267.3	289.7	317.2	316.9	315.3	311.7	310.4
65°	1821.9	1738.0	971.0	247.3	225.3	256.4	286.1	288.3	288.5	288.3	288.3
67.5°	1807.8	1642.3	733.7	196.9	190.6	222.5	255.3	258.3	260.5	261.1	261.6
70°	1647.4	1431.9	478.4	157.1	159.8	192.8	226.1	229.1	231.0	233.2	234.3
72.5°	1284.1	1052.8	273.9	127.1	132.8	167.2	197.2	200.7	201.8	205.9	207.6
75°	782.5	619.1	147.8	100.1	109.1	142.9	168.5	172.6	174.6	179.5	180.0
77.5°	372.1	268.1	84.3	78.0	87.8	116.7	142.4	147.0	141.9	144.5	142.4
80°	125.8	99.5	53.2	59.4	67.1	91.1	114.0	118.7	107.7	107.2	106.1
82.5°	43.9	40.4	33.8	39.6	43.4	65.2	86.2	92.1	80.2	79.9	76.1
85°	17.2	16.4	18.9	21.5	25.9	40.1	56.7	59.8	49.4	39.8	39.3
87.5°	3.6	3.8	4.6	4.9	7.9	13.9	20.5	25.1	19.9	16.9	15.6
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)