

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: P881719

Luminaire Tested: **NAV-SB1B-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5551 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

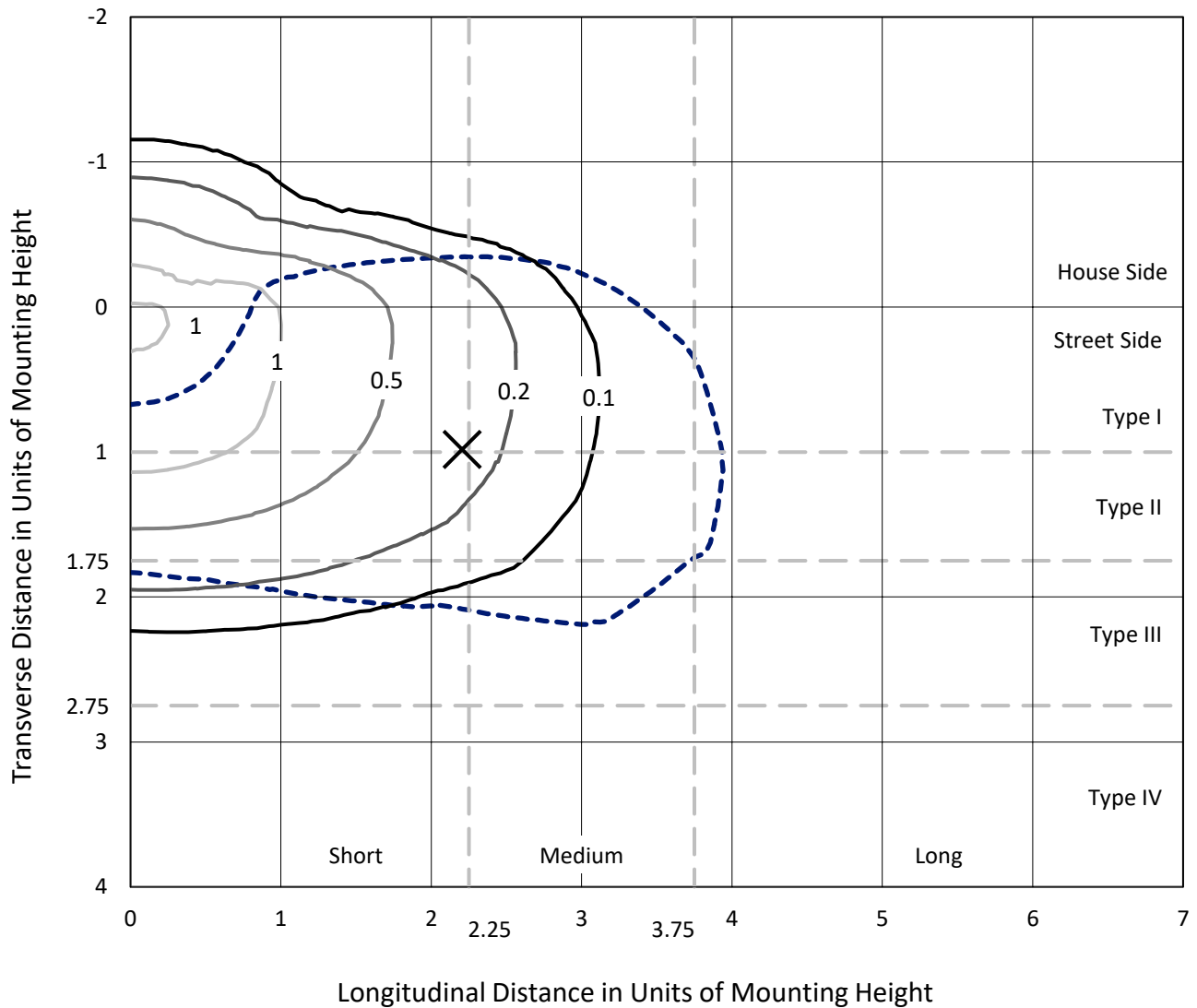
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

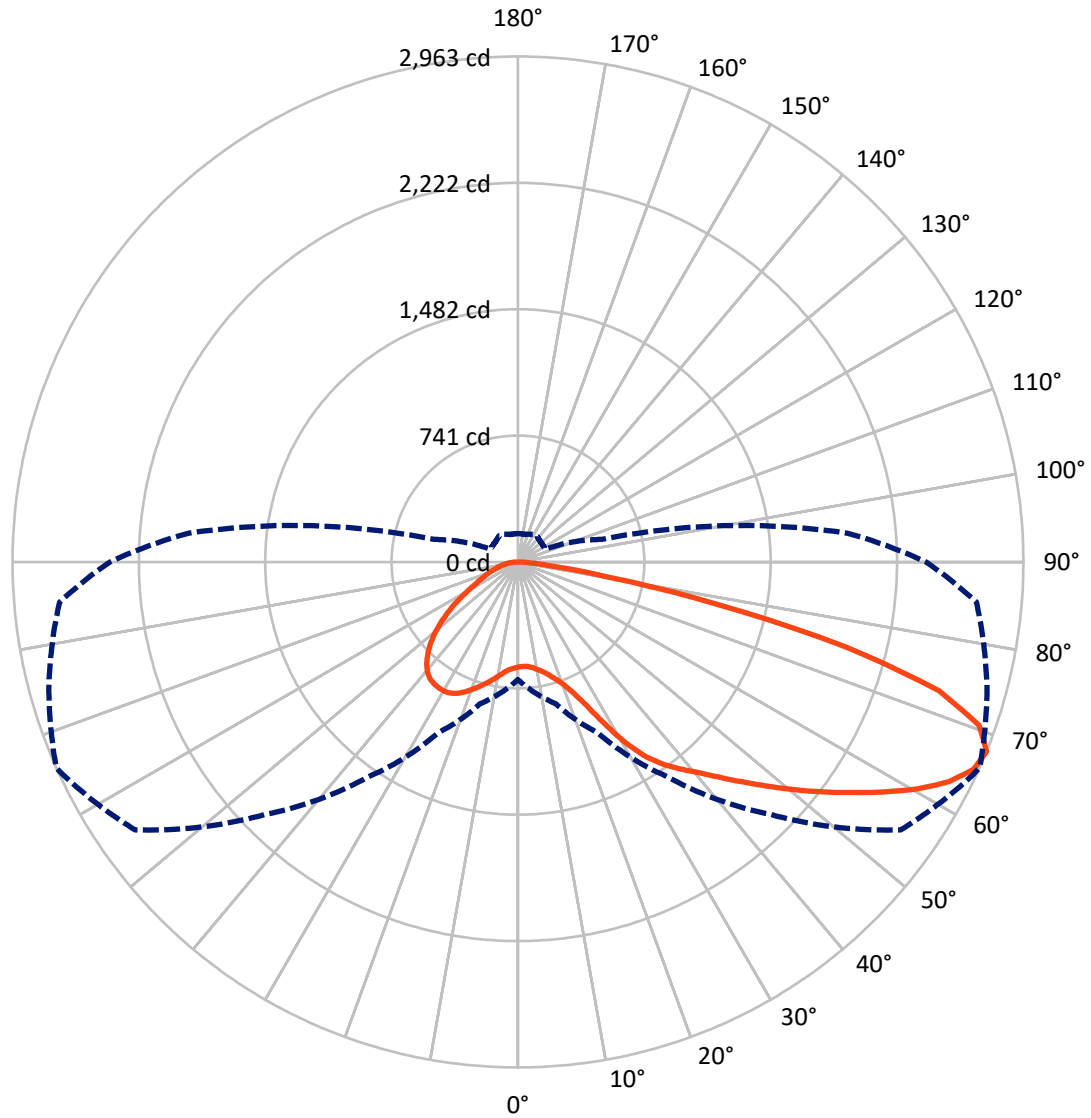
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Short - N/A

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CATALOG NUMBER: NAV-SB1B-730-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1380.2	0.0	1380.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	4170.8	0.0	4170.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	5551.0	0.0	5551.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.0	1.1
10°-20°	201.7	3.6
20°-30°	388.7	7.0
30°-40°	681.6	12.3
40°-50°	1013.3	18.3
50°-60°	1284.4	23.1
60°-70°	1256.8	22.6
70°-80°	599.5	10.8
80°-90°	64.1	1.2
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°	5551.0	100.0
0°-180°	5551.0	100.0

Coefficient of Utilization



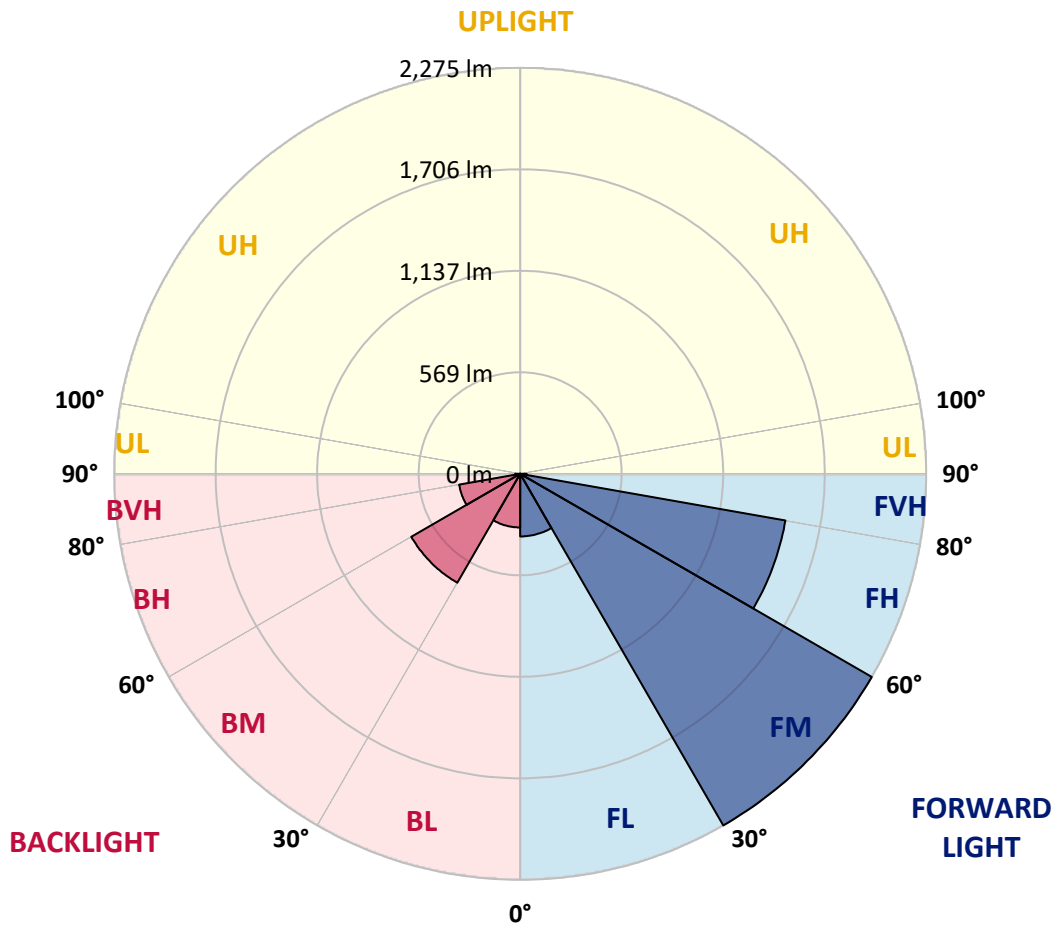
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	350.8	6.3			
FM (30°-60°)	2274.8	41.0			
FH (60°-80°)	1508.9	27.2			G1/1800
FVH (80°-90°)	36.3	0.7			G1/100
BL (0°-30°)	300.7	5.4	B1/500		
BM (30°-60°)	704.5	12.7	B1/1000		
BH (60°-80°)	347.3	6.3	B1/500		G1/500
BVH (80°-90°)	27.7	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



REPORT NUMBER: P881719
 CATALOG NUMBER: NAV-SB1B-730-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7
2.5°	609.3	612.8	611.9	610.4	610.1	610.7	611.6	612.5	612.2	613.6	616.0
5°	607.5	611.0	610.7	610.7	611.9	614.2	615.7	617.1	615.7	617.4	620.6
7.5°	608.7	611.3	612.5	613.6	616.6	620.9	624.4	627.6	625.9	627.9	632.0
10°	623.6	625.6	626.8	626.8	628.8	633.8	637.3	643.1	641.6	644.8	650.1
12.5°	650.7	652.7	652.7	651.6	653.0	656.2	657.4	663.8	661.2	666.4	671.7
15°	683.9	688.0	684.8	682.8	683.3	686.6	686.3	691.2	688.6	693.0	697.6
17.5°	720.7	725.9	720.7	720.4	719.2	722.7	723.0	727.4	722.7	725.9	729.1
20°	764.1	771.4	767.0	768.5	765.9	767.3	768.8	775.2	767.9	770.3	769.4
22.5°	825.4	834.1	829.5	835.0	833.3	832.1	831.8	843.2	831.8	832.7	824.2
25°	914.6	925.1	917.0	924.5	924.5	928.3	932.7	947.3	928.3	922.8	900.9
27.5°	1046.5	1057.0	1040.9	1045.6	1044.1	1053.5	1048.8	1084.9	1064.5	1055.5	1011.5
30°	1205.1	1223.8	1193.4	1192.3	1190.8	1205.7	1212.4	1236.3	1215.6	1206.6	1153.5
32.5°	1376.6	1396.1	1360.0	1349.5	1343.9	1353.0	1347.4	1366.7	1352.4	1338.4	1272.8
35°	1558.0	1577.3	1542.8	1522.4	1500.3	1481.3	1461.5	1466.4	1453.0	1431.7	1363.8
37.5°	1729.5	1764.8	1728.3	1706.5	1665.6	1628.6	1573.2	1550.1	1537.6	1518.1	1449.5
40°	1904.2	1924.3	1896.6	1878.0	1833.6	1775.6	1686.9	1638.2	1621.3	1602.3	1544.3
42.5°	2032.8	2052.1	2037.2	2024.4	1989.7	1922.3	1807.7	1746.7	1722.2	1700.9	1651.6
45°	2134.9	2149.2	2139.9	2144.5	2129.6	2064.3	1932.8	1863.1	1837.7	1811.7	1773.0
47.5°	2176.0	2191.2	2206.1	2233.8	2259.1	2211.0	2067.2	1989.1	1962.2	1935.7	1897.5
50°	2171.4	2186.8	2230.0	2288.9	2367.6	2351.6	2209.0	2123.2	2098.4	2068.1	2032.8
52.5°	2134.0	2151.5	2206.9	2304.9	2430.3	2456.9	2353.3	2261.8	2238.4	2202.3	2167.0
55°	2036.0	2046.5	2129.6	2268.5	2445.2	2530.4	2494.8	2409.3	2386.0	2335.6	2297.1
57.5°	1854.3	1869.5	1990.5	2170.2	2407.9	2580.3	2619.0	2564.5	2542.0	2469.4	2429.2
60°	1617.2	1641.4	1780.0	2005.1	2312.8	2580.0	2731.9	2717.0	2698.4	2601.3	2559.3
62.5°	1348.9	1376.9	1510.2	1771.8	2146.6	2506.8	2802.5	2844.8	2835.2	2722.9	2669.2
65°	1036.0	1055.2	1187.9	1469.9	1887.9	2349.6	2810.7	2932.0	2933.7	2815.3	2726.7
67.5°	689.8	745.2	860.4	1103.0	1541.4	2092.6	2738.9	2946.3	2963.2	2847.1	2697.8
70°	336.6	409.5	522.4	716.9	1103.0	1698.6	2551.4	2829.0	2866.7	2754.4	2525.7
72.5°	139.7	163.3	224.9	353.8	633.2	1146.2	2174.6	2511.1	2580.8	2440.6	2123.5
75°	94.2	102.1	128.6	181.4	288.4	565.2	1568.2	1872.4	1984.7	1843.2	1506.7
77.5°	72.6	77.6	93.6	126.9	171.5	213.8	839.4	1128.4	1186.4	1098.4	784.0
80°	57.2	61.0	70.0	92.5	121.6	114.3	286.1	511.3	544.8	457.0	252.0
82.5°	49.6	51.0	50.2	62.7	80.8	66.8	93.9	188.7	208.2	151.1	82.2
85°	35.9	40.0	41.7	38.8	42.9	33.8	38.5	66.8	73.5	65.6	46.4
87.5°	14.6	21.6	26.5	25.1	15.7	9.6	12.0	19.5	22.5	24.5	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P881719
 CATALOG NUMBER: NAV-SB1B-730-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7	615.7
2.5°	616.3	618.3	619.8	621.5	622.7	624.4	627.9	630.0	630.3	631.7	631.4
5°	621.8	624.7	627.9	632.6	637.8	642.2	648.9	653.6	655.3	656.8	656.5
7.5°	633.8	637.8	643.7	651.8	659.4	665.3	673.4	679.0	684.5	686.6	686.8
10°	651.6	657.4	665.8	676.9	685.1	692.7	701.1	705.8	711.3	713.7	714.8
12.5°	673.7	679.8	690.9	706.4	714.0	719.2	722.1	721.0	722.1	724.2	724.8
15°	699.1	705.8	718.3	735.0	740.2	735.5	729.1	723.3	722.4	723.0	725.0
17.5°	729.1	734.1	748.7	762.7	758.9	739.6	725.6	716.3	711.6	710.2	712.2
20°	771.1	771.1	783.1	791.8	766.5	733.8	711.9	696.8	687.1	683.1	682.2
22.5°	822.2	817.5	825.1	819.0	765.0	717.5	687.1	660.9	646.3	640.5	639.6
25°	886.9	881.4	879.3	841.4	754.5	691.5	642.2	610.4	597.6	594.4	595.0
27.5°	984.6	970.6	944.1	853.7	735.3	650.7	589.7	560.3	553.0	553.3	554.1
30°	1114.7	1086.7	1021.7	855.7	703.8	592.9	536.1	515.1	511.6	513.0	518.0
32.5°	1235.2	1208.6	1101.0	846.4	655.3	536.3	487.9	473.9	468.7	470.4	472.8
35°	1329.6	1322.4	1174.5	833.3	595.8	483.3	444.8	432.8	422.6	420.3	422.0
37.5°	1418.9	1416.0	1229.6	814.9	536.9	445.6	410.1	394.3	379.4	371.3	371.6
40°	1516.9	1514.0	1265.8	786.6	484.7	413.0	378.9	358.1	339.8	324.9	326.4
42.5°	1627.1	1609.9	1283.0	746.0	440.4	385.3	353.5	325.5	301.3	287.6	288.4
45°	1747.6	1708.8	1282.7	694.4	403.1	359.9	326.4	286.7	264.2	251.4	250.8
47.5°	1875.3	1803.3	1266.9	637.3	366.9	331.9	284.4	254.0	239.2	231.3	229.5
50°	2007.2	1891.7	1240.1	571.6	329.9	300.1	258.1	237.4	226.0	218.7	216.1
52.5°	2131.1	1971.9	1207.7	497.3	292.2	269.2	246.4	230.4	218.4	210.3	206.8
55°	2246.3	2041.0	1161.9	421.1	261.6	248.5	240.9	227.5	213.8	204.2	200.4
57.5°	2348.7	2085.9	1082.9	349.7	239.7	234.2	235.1	222.5	206.8	198.6	193.4
60°	2433.8	2118.9	966.0	283.5	221.9	220.2	226.0	213.2	194.8	185.5	181.4
62.5°	2484.9	2118.3	822.5	232.2	206.8	207.4	214.1	201.5	182.9	174.1	171.5
65°	2480.5	2066.4	665.0	198.6	192.2	192.8	201.5	188.7	173.0	167.7	167.4
67.5°	2392.7	1939.8	510.1	176.7	176.2	178.8	189.0	179.9	166.8	166.2	167.1
70°	2155.0	1677.0	367.5	159.2	159.5	163.3	176.7	174.4	163.6	164.8	164.5
72.5°	1728.0	1278.6	246.7	140.9	141.2	147.3	165.1	170.0	160.4	175.9	178.2
75°	1150.9	797.4	158.7	121.3	121.6	129.5	154.9	161.6	151.7	175.3	176.7
77.5°	553.0	358.4	114.9	102.1	102.1	109.4	133.9	144.7	129.2	136.2	124.8
80°	191.0	134.7	90.4	82.2	80.5	85.5	112.9	125.4	111.4	102.7	96.2
82.5°	75.2	70.0	72.6	63.9	58.0	61.2	87.8	103.5	82.0	74.1	73.8
85°	43.2	45.5	51.3	42.3	33.5	37.6	64.5	74.4	61.8	54.5	55.7
87.5°	11.7	16.0	23.6	21.9	15.2	16.0	30.6	41.1	35.6	27.4	28.3
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)