

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: P882289

Luminaire Tested: **NAV-SB2A-830-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882289
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-SB2A-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8005 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

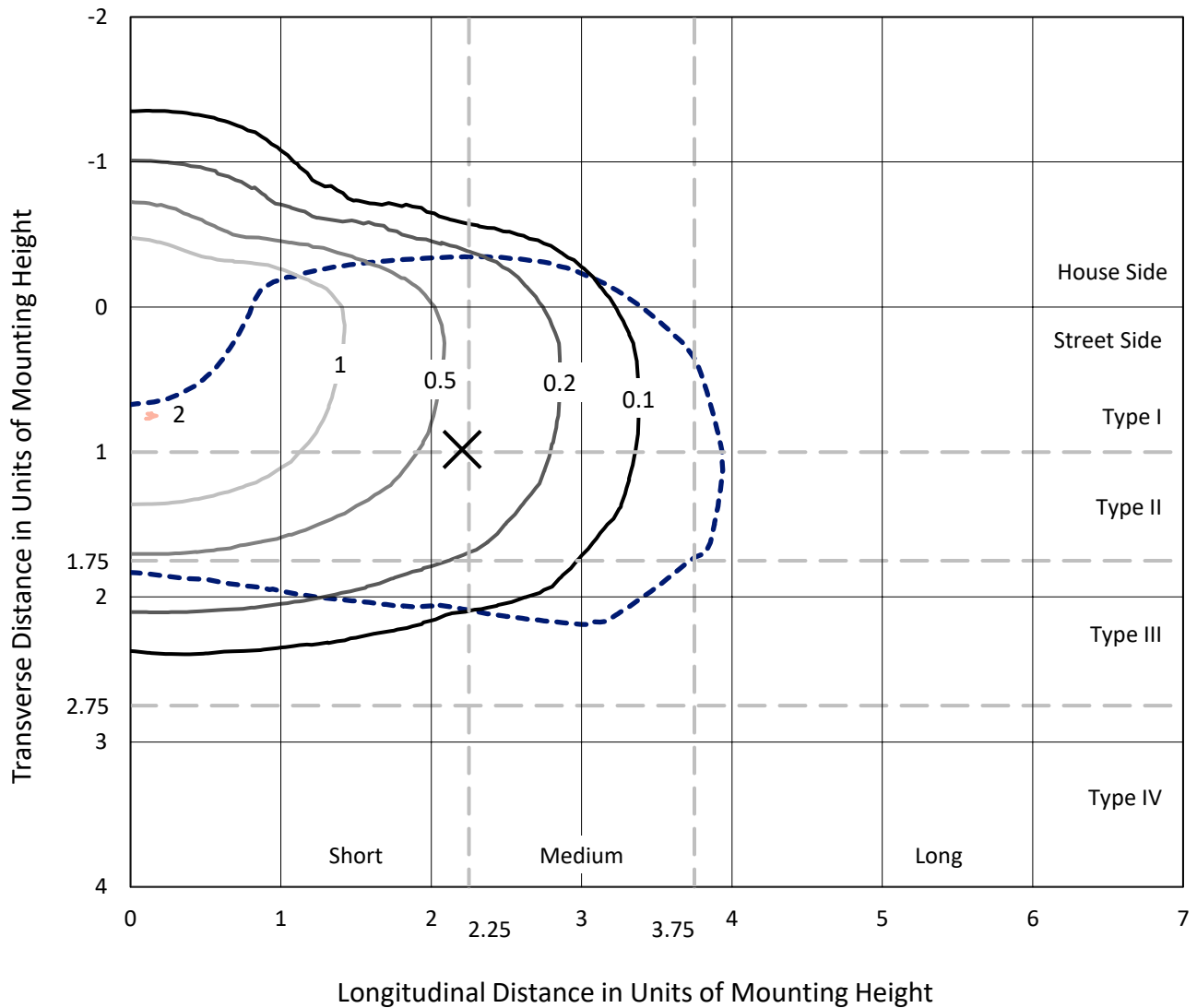
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

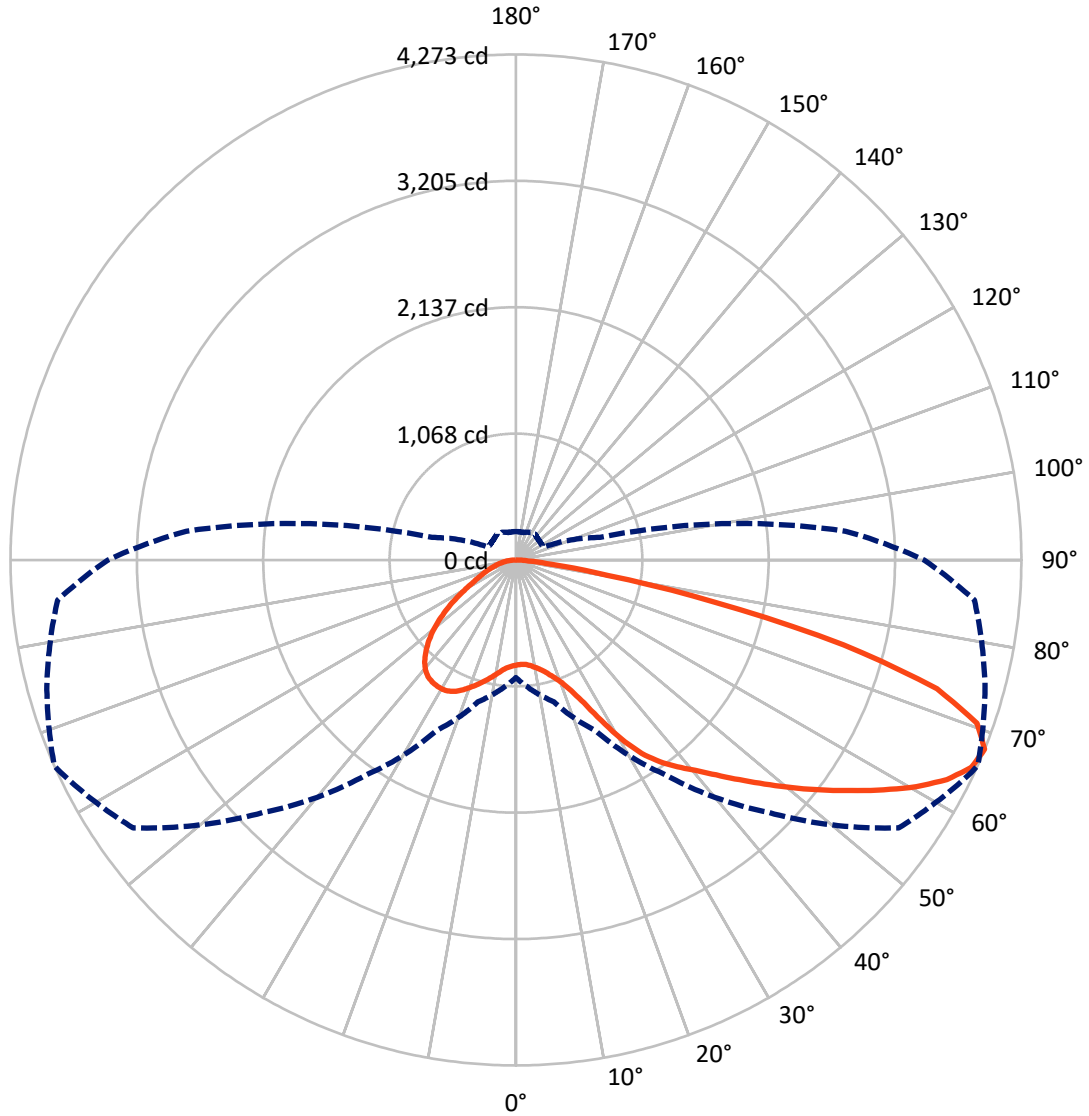
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type III - Short - N/A

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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	1990.4	0.0	1990.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	6014.6	0.0	6014.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	8005.0	0.0	8005.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.0	1.1
10°-20°	290.8	3.6
20°-30°	560.6	7.0
30°-40°	982.9	12.3
40°-50°	1461.2	18.3
50°-60°	1852.2	23.1
60°-70°	1812.4	22.6
70°-80°	864.5	10.8
80°-90°	92.4	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°	8005.0	100.0
0°-180°	8005.0	100.0

Coefficient of Utilization



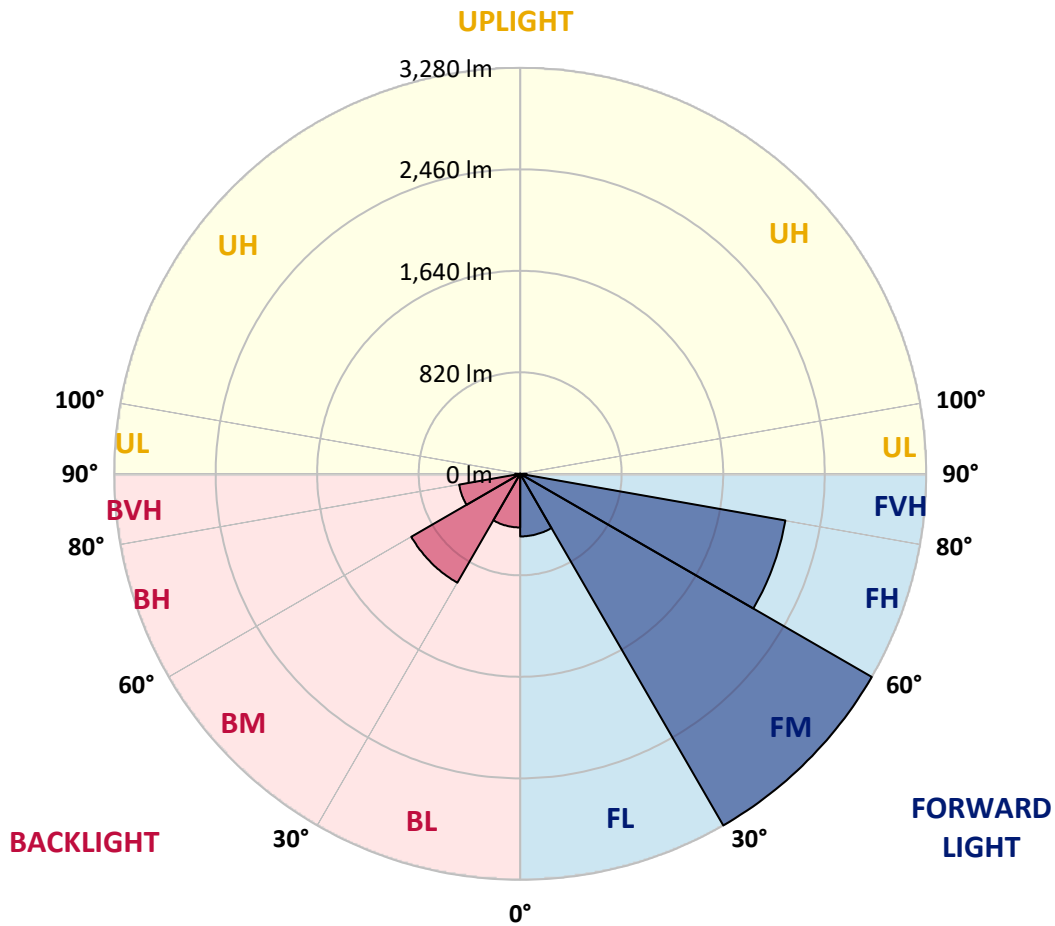
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	505.8	6.3			
FM (30°-60°)	3280.4	41.0			
FH (60°-80°)	2176.0	27.2			G2/5000
FVH (80°-90°)	52.4	0.7			G1/100
BL (0°-30°)	433.6	5.4	B1/500		
BM (30°-60°)	1015.9	12.7	B2/2500		
BH (60°-80°)	500.9	6.3	B2/1000		G2/1000
BVH (80°-90°)	40.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9
2.5°	878.6	883.7	882.4	880.3	879.9	880.7	882.0	883.2	882.8	884.9	888.3
5°	876.1	881.1	880.7	880.7	882.4	885.8	887.9	890.0	887.9	890.4	895.0
7.5°	877.8	881.6	883.2	884.9	889.1	895.4	900.5	905.1	902.6	905.5	911.4
10°	899.2	902.2	903.8	903.8	906.8	913.9	919.0	927.4	925.3	929.9	937.5
12.5°	938.3	941.3	941.3	939.6	941.7	946.3	948.0	957.3	953.5	961.0	968.6
15°	986.3	992.2	987.5	984.6	985.4	990.1	989.6	996.8	993.0	999.3	1006.0
17.5°	1039.3	1046.8	1039.3	1038.9	1037.2	1042.2	1042.6	1048.9	1042.2	1046.8	1051.5
20°	1101.9	1112.5	1106.1	1108.2	1104.5	1106.6	1108.7	1117.9	1107.4	1110.8	1109.5
22.5°	1190.3	1202.9	1196.2	1204.1	1201.6	1199.9	1199.5	1215.9	1199.5	1200.8	1188.6
25°	1319.0	1334.1	1322.3	1333.3	1333.3	1338.7	1345.0	1366.1	1338.7	1330.7	1299.2
27.5°	1509.1	1524.2	1501.1	1507.8	1505.7	1519.2	1512.4	1564.6	1535.1	1522.1	1458.6
30°	1737.9	1764.8	1721.0	1719.4	1717.3	1738.7	1748.4	1782.9	1753.0	1740.0	1663.4
32.5°	1985.2	2013.4	1961.2	1946.1	1938.1	1951.1	1943.1	1970.9	1950.3	1930.1	1835.4
35°	2246.8	2274.5	2224.9	2195.5	2163.5	2136.2	2107.6	2114.7	2095.4	2064.7	1966.7
37.5°	2494.1	2545.0	2492.4	2460.9	2402.0	2348.6	2268.6	2235.4	2217.3	2189.2	2090.3
40°	2746.0	2775.0	2735.1	2708.2	2644.2	2560.5	2432.7	2362.4	2338.0	2310.7	2227.0
42.5°	2931.5	2959.3	2937.8	2919.3	2869.2	2772.1	2606.8	2518.9	2483.6	2452.9	2381.8
45°	3078.7	3099.3	3085.9	3092.6	3071.1	2976.9	2787.2	2686.7	2650.1	2612.7	2556.8
47.5°	3138.0	3159.9	3181.3	3221.3	3257.9	3188.5	2981.1	2868.4	2829.7	2791.4	2736.3
50°	3131.3	3153.6	3215.8	3300.8	3414.3	3391.2	3185.5	3061.9	3026.1	2982.4	2931.5
52.5°	3077.4	3102.7	3182.6	3323.9	3504.8	3543.0	3393.7	3261.7	3228.0	3175.9	3125.0
55°	2936.1	2951.3	3071.1	3271.3	3526.2	3649.0	3597.7	3474.5	3440.8	3368.1	3312.5
57.5°	2674.1	2696.0	2870.5	3129.6	3472.4	3720.9	3776.9	3698.2	3665.8	3561.1	3503.1
60°	2332.2	2367.1	2566.8	2891.5	3335.3	3720.5	3939.6	3918.2	3891.3	3751.2	3690.7
62.5°	1945.2	1985.6	2177.8	2555.1	3095.5	3614.9	4041.4	4102.4	4088.5	3926.6	3849.2
65°	1493.9	1521.7	1713.1	2119.8	2722.5	3388.3	4053.2	4228.2	4230.7	4059.9	3932.1
67.5°	994.7	1074.6	1240.7	1590.7	2222.8	3017.7	3949.7	4248.8	4273.2	4105.8	3890.4
70°	485.4	590.5	753.3	1033.8	1590.7	2449.5	3679.3	4079.7	4134.0	3972.0	3642.3
72.5°	201.5	235.5	324.3	510.2	913.1	1652.9	3135.9	3621.3	3721.8	3519.5	3062.3
75°	135.8	147.2	185.5	261.6	416.0	815.1	2261.5	2700.2	2862.1	2658.1	2172.8
77.5°	104.7	111.9	135.0	183.0	247.3	308.3	1210.5	1627.3	1711.0	1583.9	1130.5
80°	82.4	87.9	100.9	133.3	175.4	164.9	412.6	737.3	785.7	659.1	363.4
82.5°	71.5	73.6	72.3	90.4	116.5	96.3	135.4	272.1	300.3	217.9	118.6
85°	51.7	57.6	60.1	55.9	61.8	48.8	55.5	96.3	106.0	94.6	66.9
87.5°	21.0	31.1	38.3	36.2	22.7	13.9	17.2	28.2	32.4	35.3	21.9
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°	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9
2.5°	888.7	891.6	893.7	896.3	898.0	900.5	905.5	908.5	908.9	911.0	910.6
5°	896.7	900.9	905.5	912.3	919.8	926.1	935.8	942.5	945.1	947.2	946.7
7.5°	913.9	919.8	928.2	940.0	950.9	959.4	971.1	979.1	987.1	990.1	990.5
10°	939.6	948.0	960.2	976.2	988.0	998.9	1011.1	1017.8	1025.8	1029.2	1030.9
12.5°	971.6	980.4	996.4	1018.7	1029.6	1037.2	1041.4	1039.7	1041.4	1044.3	1045.2
15°	1008.1	1017.8	1035.9	1059.9	1067.5	1060.7	1051.5	1043.1	1041.8	1042.6	1045.6
17.5°	1051.5	1058.6	1079.6	1099.8	1094.4	1066.6	1046.4	1033.0	1026.2	1024.1	1027.1
20°	1112.0	1112.0	1129.3	1141.9	1105.3	1058.2	1026.7	1004.8	990.9	985.0	983.8
22.5°	1185.6	1178.9	1189.8	1181.0	1103.2	1034.6	990.9	953.1	932.0	923.6	922.3
25°	1279.0	1271.0	1268.1	1213.4	1088.1	997.2	926.1	880.3	861.8	857.2	858.0
27.5°	1419.9	1399.7	1361.4	1231.1	1060.3	938.3	850.4	807.9	797.4	797.9	799.1
30°	1607.5	1567.1	1473.3	1234.0	1014.9	855.1	773.0	742.8	737.7	739.8	747.0
32.5°	1781.2	1742.9	1587.7	1220.5	945.1	773.5	703.6	683.5	675.9	678.4	681.8
35°	1917.5	1906.9	1693.7	1201.6	859.3	696.9	641.4	624.2	609.4	606.1	608.6
37.5°	2046.2	2042.0	1773.2	1175.1	774.3	642.7	591.3	568.6	547.2	535.4	535.8
40°	2187.5	2183.3	1825.3	1134.3	699.0	595.6	546.3	516.5	490.0	468.5	470.6
42.5°	2346.5	2321.6	1850.2	1075.9	635.1	555.6	509.8	469.4	434.5	414.7	416.0
45°	2520.2	2464.2	1849.7	1001.4	581.3	519.0	470.6	413.4	381.1	362.5	361.7
47.5°	2704.4	2600.5	1827.0	919.0	529.1	478.6	410.1	366.3	344.9	333.5	331.0
50°	2894.5	2727.9	1788.3	824.4	475.7	432.8	372.2	342.4	326.0	315.4	311.7
52.5°	3073.2	2843.6	1741.7	717.1	421.4	388.2	355.4	332.3	315.0	303.2	298.2
55°	3239.4	2943.3	1675.6	607.3	377.3	358.3	347.4	328.1	308.3	294.4	288.9
57.5°	3387.0	3008.0	1561.6	504.3	345.7	337.7	339.0	320.9	298.2	286.4	278.8
60°	3509.8	3055.6	1393.0	408.8	320.1	317.5	326.0	307.4	281.0	267.5	261.6
62.5°	3583.4	3054.7	1186.1	334.8	298.2	299.0	308.7	290.6	263.7	251.1	247.3
65°	3577.1	2979.9	958.9	286.4	277.2	278.0	290.6	272.1	249.4	241.8	241.4
67.5°	3450.5	2797.3	735.6	254.9	254.0	257.8	272.5	259.5	240.6	239.7	241.0
70°	3107.7	2418.4	529.9	229.6	230.1	235.5	254.9	251.5	235.9	237.6	237.2
72.5°	2492.0	1843.9	355.8	203.1	203.6	212.4	238.1	245.2	231.3	253.6	257.0
75°	1659.6	1149.9	228.8	175.0	175.4	186.7	223.3	233.0	218.7	252.8	254.9
77.5°	797.4	516.9	165.7	147.2	147.2	157.7	193.0	208.6	186.3	196.4	180.0
80°	275.5	194.3	130.4	118.6	116.1	123.2	162.8	180.9	160.7	148.0	138.8
82.5°	108.5	100.9	104.7	92.1	83.7	88.3	126.6	149.3	118.2	106.8	106.4
85°	62.2	65.6	74.0	61.0	48.4	54.3	92.9	107.2	89.2	78.6	80.3
87.5°	16.8	23.1	34.1	31.5	21.9	23.1	44.2	59.3	51.3	39.5	40.8
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)