

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: P881949

Luminaire Tested: **NAV-SB1C-830-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881949
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-SB1C-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6563 lumens
Efficiency: N/A
Efficacy: 120.6 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

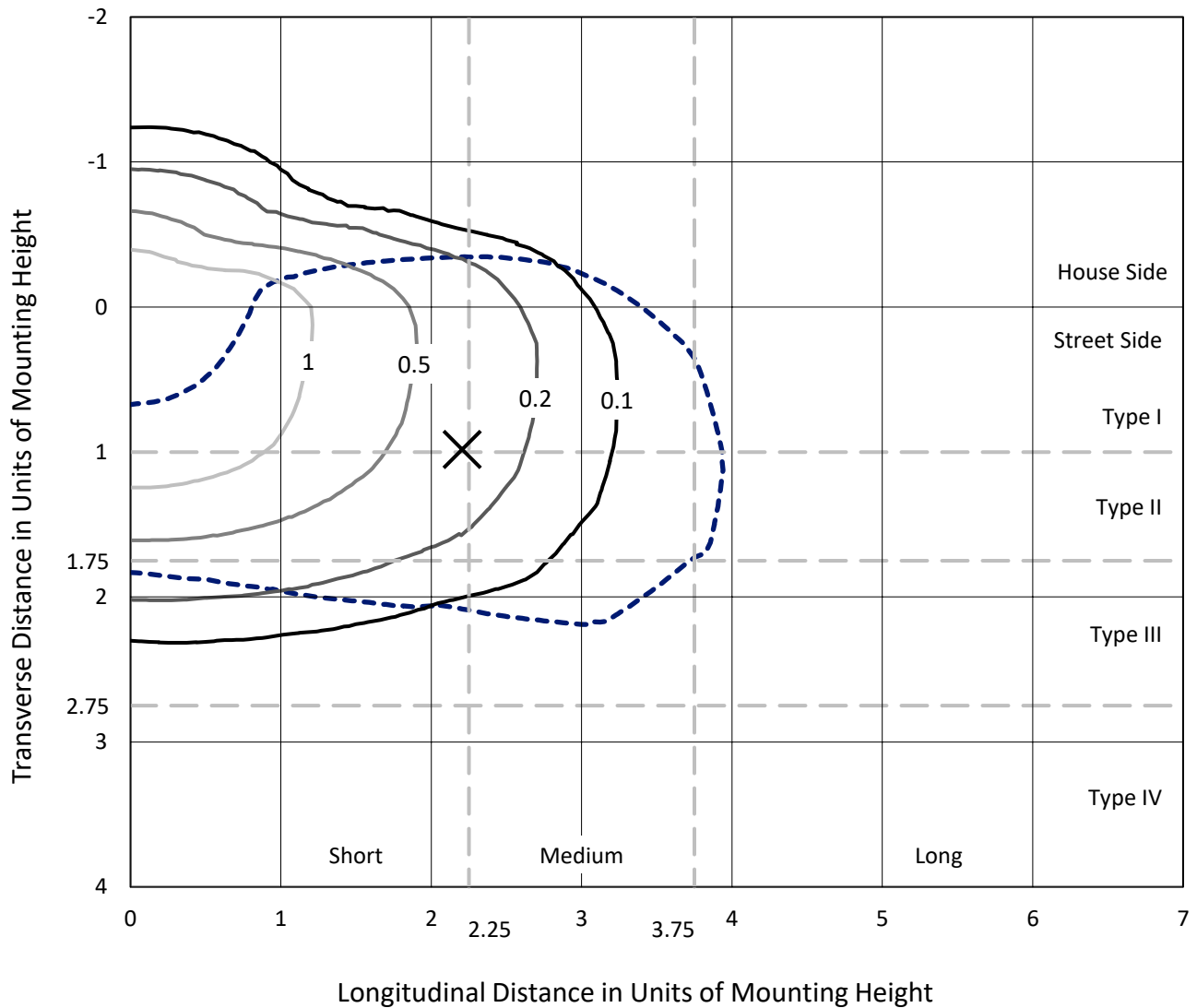
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881949
 CATALOG NUMBER: NAV-SB1C-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination

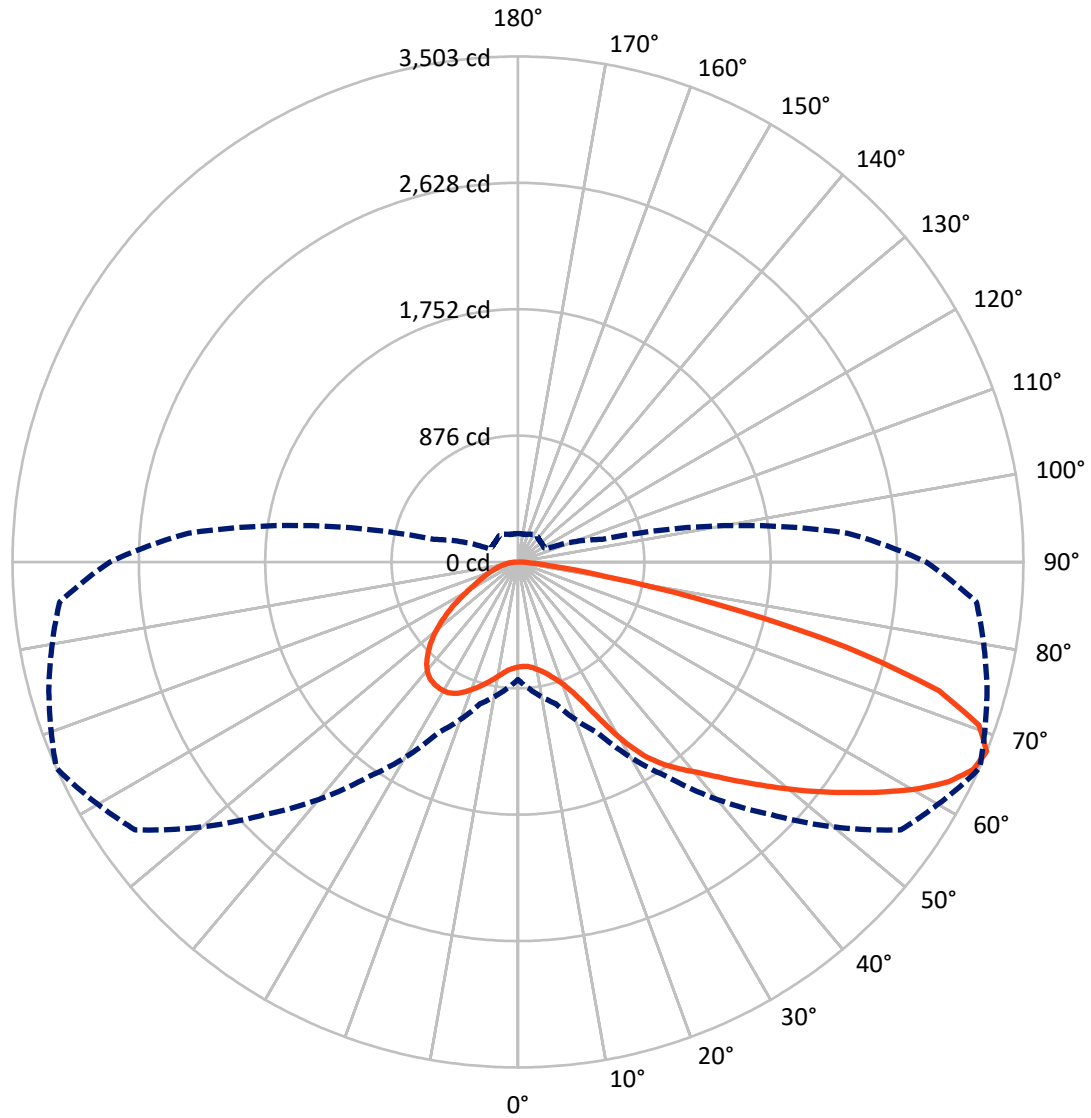
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - N/A

REPORT NUMBER: P881949
CATALOG NUMBER: NAV-SB1C-830-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P881949
 CATALOG NUMBER: NAV-SB1C-830-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1631.9	0.0	1631.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	4931.1	0.0	4931.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	6563.0	0.0	6563.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	1.1
10°-20°	238.4	3.6
20°-30°	459.6	7.0
30°-40°	805.8	12.3
40°-50°	1198.0	18.3
50°-60°	1518.6	23.1
60°-70°	1485.9	22.6
70°-80°	708.8	10.8
80°-90°	75.7	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°	6563.0	100.0
0°-180°	6563.0	100.0

Coefficient of Utilization

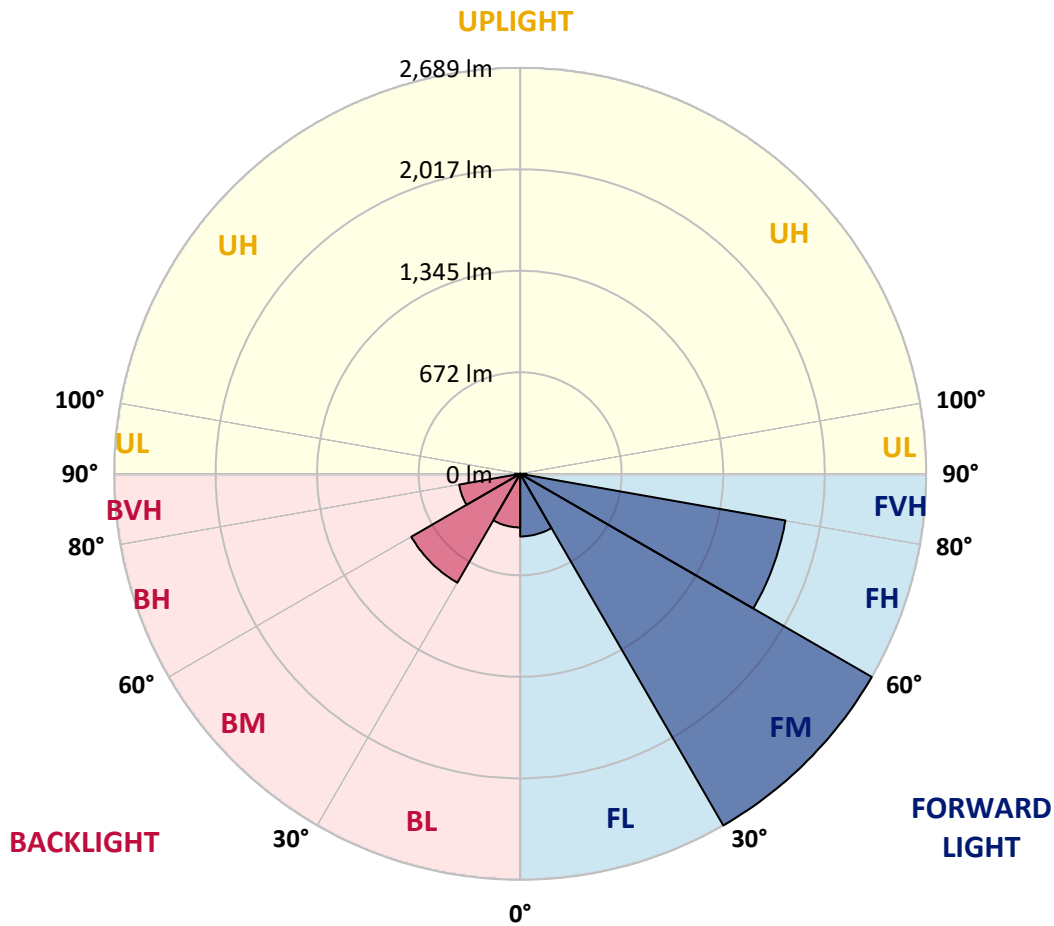


REPORT NUMBER: P881949
 CATALOG NUMBER: NAV-SB1C-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	414.7	6.3			
FM (30°-60°)	2689.5	41.0			
FH (60°-80°)	1784.0	27.2			G1/1800
FVH (80°-90°)	42.9	0.7			G1/100
BL (0°-30°)	355.5	5.4	B1/500		
BM (30°-60°)	832.9	12.7	B1/1000		
BH (60°-80°)	410.7	6.3	B1/500		G1/500
BVH (80°-90°)	32.8	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: P881949
 CATALOG NUMBER: NAV-SB1C-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9
2.5°	720.3	724.5	723.4	721.7	721.4	722.1	723.1	724.1	723.8	725.5	728.3
5°	718.3	722.4	722.1	722.1	723.4	726.2	727.9	729.6	727.9	730.0	733.8
7.5°	719.6	722.8	724.1	725.5	729.0	734.1	738.3	742.1	740.0	742.4	747.2
10°	737.2	739.6	741.0	741.0	743.4	749.3	753.4	760.3	758.6	762.4	768.6
12.5°	769.3	771.7	771.7	770.3	772.1	775.9	777.2	784.8	781.7	787.9	794.1
15°	808.6	813.4	809.6	807.2	807.9	811.7	811.4	817.2	814.1	819.3	824.8
17.5°	852.1	858.3	852.1	851.7	850.3	854.5	854.8	860.0	854.5	858.3	862.1
20°	903.4	912.1	906.9	908.6	905.5	907.2	909.0	916.5	907.9	910.7	909.6
22.5°	975.9	986.2	980.7	987.2	985.2	983.8	983.4	996.9	983.4	984.5	974.5
25°	1081.4	1093.8	1084.1	1093.1	1093.1	1097.6	1102.7	1120.0	1097.6	1091.0	1065.2
27.5°	1237.2	1249.6	1230.7	1236.2	1234.5	1245.5	1240.0	1282.7	1258.6	1247.9	1195.8
30°	1424.8	1446.9	1411.0	1409.6	1407.9	1425.5	1433.4	1461.7	1437.2	1426.5	1363.8
32.5°	1627.6	1650.7	1607.9	1595.5	1588.9	1599.6	1593.1	1615.8	1598.9	1582.4	1504.8
35°	1842.0	1864.8	1824.1	1800.0	1773.8	1751.4	1727.9	1733.8	1717.9	1692.7	1612.4
37.5°	2044.8	2086.5	2043.4	2017.6	1969.3	1925.5	1860.0	1832.7	1817.9	1794.8	1713.8
40°	2251.4	2275.1	2242.4	2220.3	2167.9	2099.3	1994.5	1936.9	1916.9	1894.5	1825.8
42.5°	2403.4	2426.2	2408.6	2393.4	2352.4	2272.7	2137.2	2065.2	2036.2	2011.0	1952.7
45°	2524.1	2541.0	2530.0	2535.5	2517.9	2440.7	2285.1	2202.7	2172.7	2142.0	2096.2
47.5°	2572.7	2590.7	2608.2	2641.0	2671.0	2614.1	2444.1	2351.7	2320.0	2288.6	2243.4
50°	2567.2	2585.5	2636.5	2706.2	2799.3	2780.3	2611.7	2510.3	2481.0	2445.1	2403.4
52.5°	2523.1	2543.8	2609.3	2725.1	2873.4	2904.8	2782.4	2674.1	2646.5	2603.8	2562.0
55°	2407.2	2419.6	2517.9	2682.0	2891.0	2991.7	2949.6	2848.6	2821.0	2761.4	2715.8
57.5°	2192.4	2210.3	2353.4	2565.8	2846.9	3050.7	3096.5	3032.0	3005.5	2919.6	2872.0
60°	1912.0	1940.7	2104.5	2370.7	2734.5	3050.3	3230.0	3212.4	3190.3	3075.5	3025.8
62.5°	1594.8	1627.9	1785.5	2094.8	2537.9	2963.8	3313.4	3363.4	3352.0	3219.3	3155.8
65°	1224.8	1247.6	1404.5	1737.9	2232.0	2777.9	3323.1	3466.5	3468.6	3328.6	3223.8
67.5°	815.5	881.0	1017.2	1304.1	1822.4	2474.1	3238.2	3483.4	3503.4	3366.2	3189.6
70°	397.9	484.1	617.6	847.6	1304.1	2008.3	3016.5	3344.8	3389.3	3256.5	2986.2
72.5°	165.2	193.1	265.9	418.3	748.6	1355.2	2571.0	2968.9	3051.3	2885.5	2510.7
75°	111.4	120.7	152.1	214.5	341.0	668.3	1854.1	2213.8	2346.5	2179.3	1781.4
77.5°	85.9	91.7	110.7	150.0	202.8	252.8	992.4	1334.1	1402.7	1298.6	926.9
80°	67.6	72.1	82.8	109.3	143.8	135.2	338.3	604.5	644.1	540.3	297.9
82.5°	58.6	60.3	59.3	74.1	95.5	79.0	111.0	223.1	246.2	178.6	97.2
85°	42.4	47.2	49.3	45.9	50.7	40.0	45.5	79.0	86.9	77.6	54.8
87.5°	17.2	25.5	31.4	29.7	18.6	11.4	14.1	23.1	26.6	29.0	17.9
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: P881949
 CATALOG NUMBER: NAV-SB1C-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9	727.9
2.5°	728.6	731.0	732.8	734.8	736.2	738.3	742.4	744.8	745.2	746.9	746.5
5°	735.2	738.6	742.4	747.9	754.1	759.3	767.2	772.8	774.8	776.5	776.2
7.5°	749.3	754.1	761.0	770.7	779.6	786.5	796.2	802.8	809.3	811.7	812.1
10°	770.3	777.2	787.2	800.3	810.0	819.0	829.0	834.5	841.0	843.8	845.2
12.5°	796.5	803.8	816.9	835.2	844.1	850.3	853.8	852.4	853.8	856.2	856.9
15°	826.5	834.5	849.3	869.0	875.2	869.6	862.1	855.2	854.1	854.8	857.2
17.5°	862.1	867.9	885.2	901.7	897.2	874.5	857.9	846.9	841.4	839.6	842.1
20°	911.7	911.7	925.9	936.2	906.2	867.6	841.7	823.8	812.4	807.6	806.5
22.5°	972.1	966.5	975.5	968.3	904.5	848.3	812.4	781.4	764.1	757.2	756.2
25°	1048.6	1042.1	1039.6	994.8	892.1	817.6	759.3	721.7	706.5	702.8	703.4
27.5°	1164.1	1147.6	1116.2	1009.3	869.3	769.3	697.2	662.4	653.8	654.1	655.2
30°	1317.9	1284.8	1207.9	1011.7	832.1	701.0	633.8	609.0	604.8	606.5	612.4
32.5°	1460.3	1429.0	1301.7	1000.7	774.8	634.1	576.9	560.3	554.1	556.2	559.0
35°	1572.1	1563.4	1388.6	985.2	704.5	571.4	525.9	511.7	499.6	496.9	499.0
37.5°	1677.6	1674.1	1453.8	963.4	634.8	526.9	484.8	466.2	448.6	439.0	439.3
40°	1793.4	1790.0	1496.5	930.0	573.1	488.3	447.9	423.4	401.7	384.1	385.9
42.5°	1923.8	1903.4	1516.9	882.1	520.7	455.5	417.9	384.8	356.2	340.0	341.0
45°	2066.2	2020.3	1516.5	821.0	476.5	425.5	385.9	339.0	312.4	297.2	296.5
47.5°	2217.2	2132.0	1497.9	753.4	433.8	392.4	336.2	300.3	282.8	273.4	271.4
50°	2373.1	2236.5	1466.2	675.9	390.0	354.8	305.2	280.7	267.2	258.6	255.5
52.5°	2519.6	2331.4	1427.9	587.9	345.5	318.3	291.4	272.4	258.3	248.6	244.5
55°	2655.8	2413.1	1373.8	497.9	309.3	293.8	284.8	269.0	252.8	241.4	236.9
57.5°	2776.9	2466.2	1280.3	413.4	283.4	276.9	277.9	263.1	244.5	234.8	228.6
60°	2877.6	2505.1	1142.1	335.2	262.4	260.3	267.2	252.1	230.3	219.3	214.5
62.5°	2937.9	2504.5	972.4	274.5	244.5	245.2	253.1	238.3	216.2	205.9	202.8
65°	2932.7	2443.1	786.2	234.8	227.2	227.9	238.3	223.1	204.5	198.3	197.9
67.5°	2828.9	2293.4	603.1	209.0	208.3	211.4	223.4	212.8	197.2	196.5	197.6
70°	2547.9	1982.7	434.5	188.3	188.6	193.1	209.0	206.2	193.4	194.8	194.5
72.5°	2043.1	1511.7	291.7	166.5	166.9	174.1	195.2	201.0	189.7	207.9	210.7
75°	1360.7	942.7	187.6	143.4	143.8	153.1	183.1	191.0	179.3	207.2	209.0
77.5°	653.8	423.8	135.9	120.7	120.7	129.3	158.3	171.0	152.8	161.0	147.6
80°	225.9	159.3	106.9	97.2	95.2	101.0	133.4	148.3	131.7	121.4	113.8
82.5°	89.0	82.8	85.9	75.5	68.6	72.4	103.8	122.4	96.9	87.6	87.2
85°	51.0	53.8	60.7	50.0	39.7	44.5	76.2	87.9	73.1	64.5	65.9
87.5°	13.8	19.0	27.9	25.9	17.9	19.0	36.2	48.6	42.1	32.4	33.4
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)