

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: P881739

Luminaire Tested: **NAV-SB1B-740-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881739
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-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6080 lumens
Efficiency: N/A
Efficacy: 152.8 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

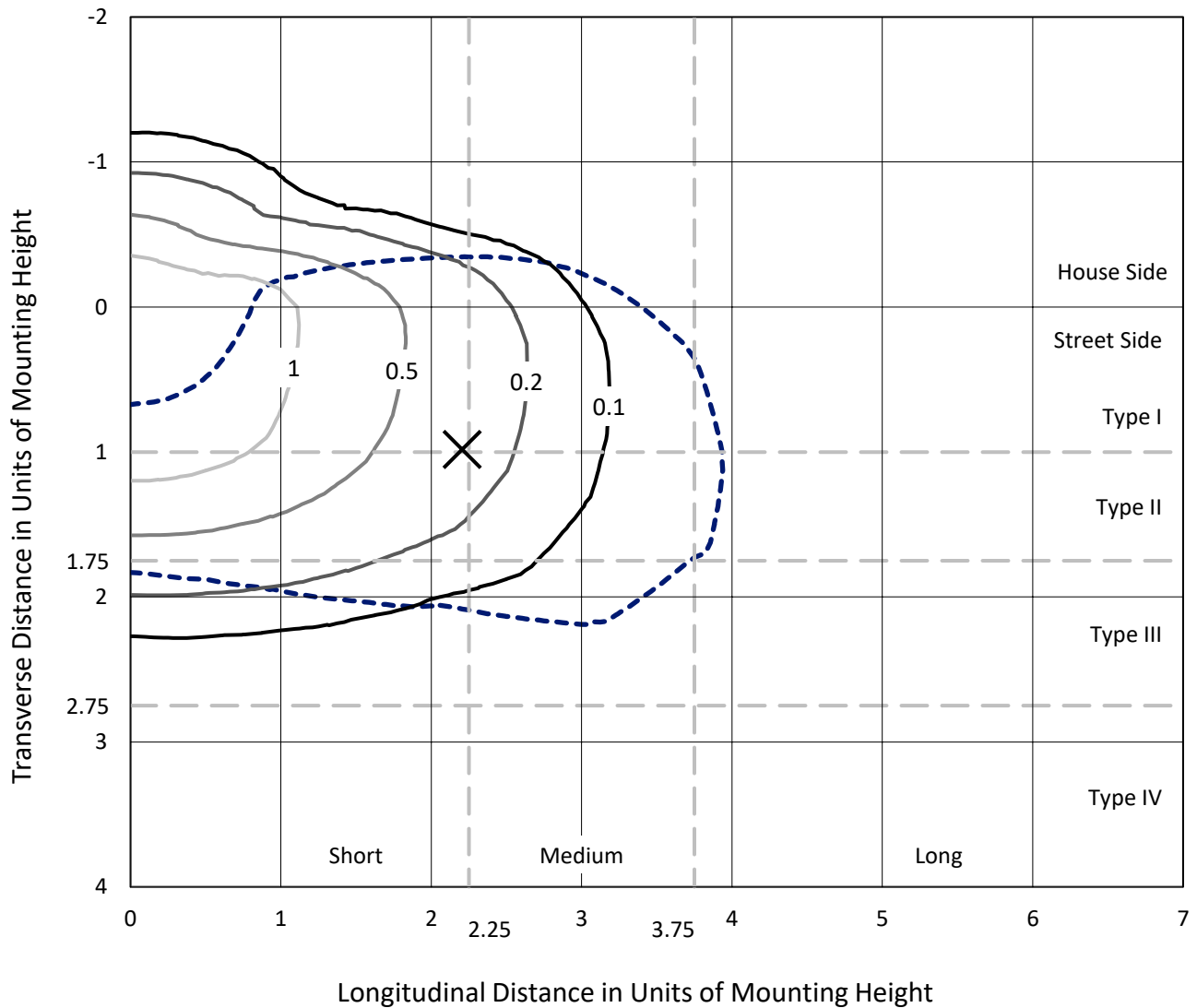
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881739
 CATALOG NUMBER: NAV-SB1B-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

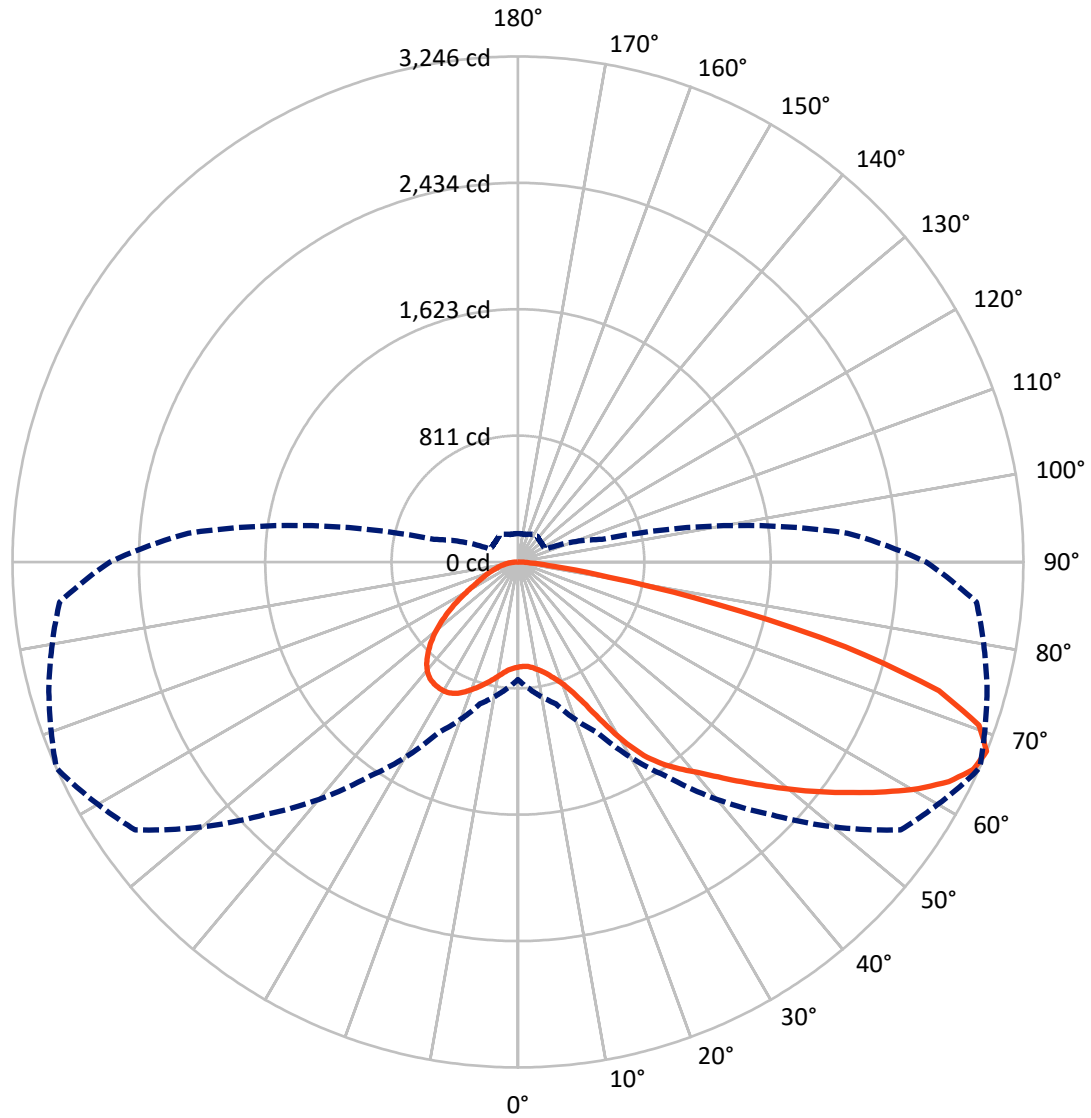
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type III - Short - N/A

REPORT NUMBER: P881739
CATALOG NUMBER: NAV-SB1B-740-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P881739
 CATALOG NUMBER: NAV-SB1B-740-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1511.8	0.0	1511.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	4568.2	0.0	4568.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	6080.0	0.0	6080.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	1.1
10°-20°	220.9	3.6
20°-30°	425.8	7.0
30°-40°	746.5	12.3
40°-50°	1109.8	18.3
50°-60°	1406.8	23.1
60°-70°	1376.5	22.6
70°-80°	656.6	10.8
80°-90°	70.2	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°	6080.0	100.0
0°-180°	6080.0	100.0

Coefficient of Utilization



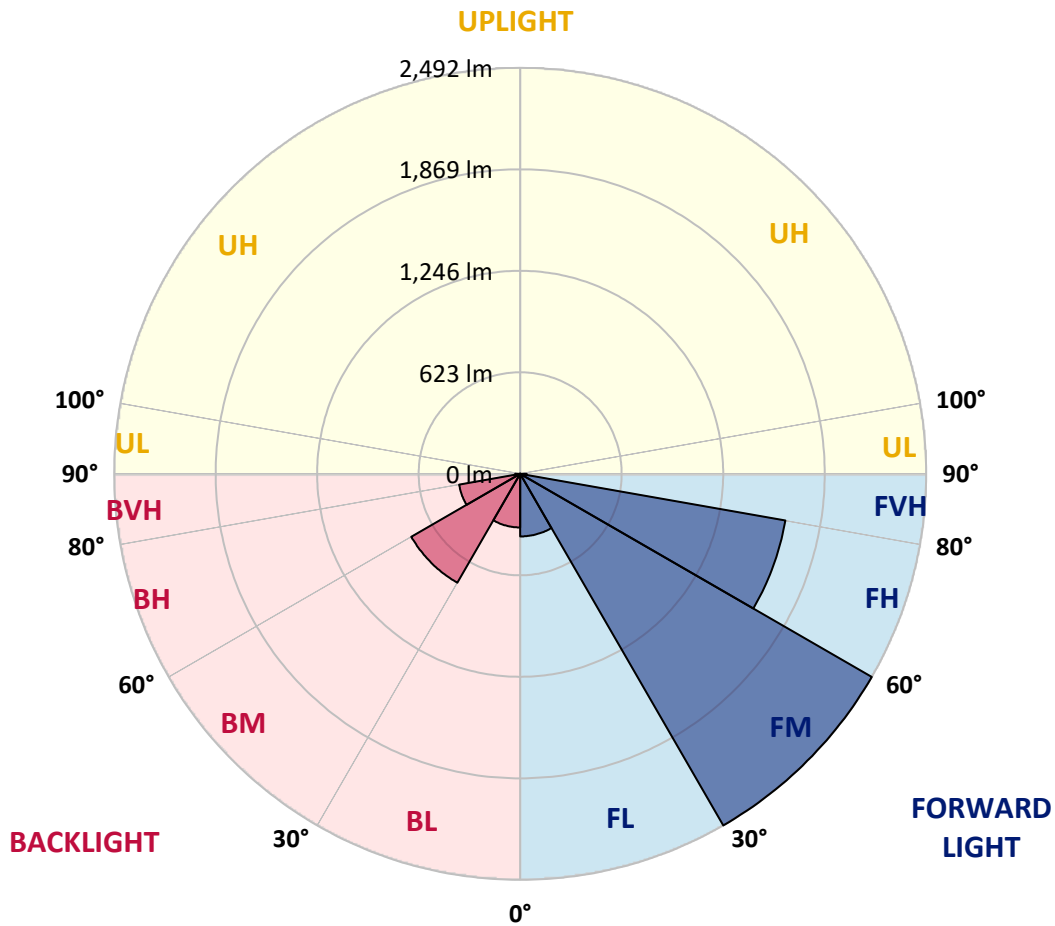
REPORT NUMBER: P881739
 CATALOG NUMBER: NAV-SB1B-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	384.2	6.3			
FM (30°-60°)	2491.5	41.0			
FH (60°-80°)	1652.7	27.2			G1/1800
FVH (80°-90°)	39.8	0.7			G1/100
BL (0°-30°)	329.3	5.4	B1/500		
BM (30°-60°)	771.6	12.7	B1/1000		
BH (60°-80°)	380.4	6.3	B1/500		G1/500
BVH (80°-90°)	30.4	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: P881739
 CATALOG NUMBER: NAV-SB1B-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4
2.5°	667.3	671.2	670.2	668.6	668.3	668.9	669.9	670.8	670.5	672.1	674.7
5°	665.4	669.2	668.9	668.9	670.2	672.8	674.4	675.9	674.4	676.3	679.8
7.5°	666.7	669.6	670.8	672.1	675.3	680.1	683.9	687.4	685.5	687.8	692.2
10°	683.0	685.2	686.5	686.5	688.7	694.2	698.0	704.4	702.8	706.3	712.0
12.5°	712.7	714.9	714.9	713.6	715.2	718.8	720.0	727.1	724.2	729.9	735.7
15°	749.1	753.6	750.1	747.8	748.5	752.0	751.7	757.1	754.2	759.0	764.1
17.5°	789.4	795.1	789.4	789.0	787.8	791.6	791.9	796.7	791.6	795.1	798.6
20°	837.0	844.9	840.1	841.7	838.9	840.5	842.1	849.1	841.1	843.7	842.7
22.5°	904.0	913.6	908.5	914.6	912.7	911.4	911.1	923.5	911.1	912.0	902.8
25°	1001.8	1013.3	1004.3	1012.6	1012.6	1016.8	1021.6	1037.6	1016.8	1010.7	986.8
27.5°	1146.2	1157.7	1140.1	1145.2	1143.6	1153.8	1148.7	1188.3	1166.0	1156.1	1107.8
30°	1320.0	1340.4	1307.2	1305.9	1304.3	1320.6	1327.9	1354.1	1331.5	1321.6	1263.4
32.5°	1507.8	1529.2	1489.6	1478.1	1472.0	1481.9	1475.8	1496.9	1481.3	1465.9	1394.1
35°	1706.5	1727.6	1689.9	1667.5	1643.2	1622.5	1600.7	1606.2	1591.5	1568.2	1493.7
37.5°	1894.3	1933.0	1893.0	1869.1	1824.4	1783.8	1723.1	1697.9	1684.1	1662.7	1587.7
40°	2085.7	2107.7	2077.4	2056.9	2008.4	1944.8	1847.7	1794.3	1775.8	1755.0	1691.5
42.5°	2226.5	2247.6	2231.3	2217.3	2179.3	2105.5	1979.9	1913.2	1886.3	1863.0	1809.0
45°	2338.4	2354.0	2343.8	2348.9	2332.6	2261.0	2117.0	2040.6	2012.8	1984.4	1941.9
47.5°	2383.4	2400.0	2416.3	2446.6	2474.4	2421.7	2264.2	2178.6	2149.2	2120.2	2078.3
50°	2378.3	2395.2	2442.5	2507.0	2593.3	2575.7	2419.5	2325.6	2298.4	2265.2	2226.5
52.5°	2337.4	2356.6	2417.3	2524.6	2662.0	2691.0	2577.6	2477.3	2451.8	2412.1	2373.5
55°	2230.1	2241.6	2332.6	2484.7	2678.2	2771.5	2732.5	2639.0	2613.4	2558.1	2516.0
57.5°	2031.0	2047.7	2180.2	2377.0	2637.4	2826.1	2868.6	2808.9	2784.3	2704.8	2660.7
60°	1771.3	1797.8	1949.6	2196.2	2533.2	2825.8	2992.3	2976.0	2955.5	2849.1	2803.1
62.5°	1477.4	1508.1	1654.1	1940.6	2351.1	2745.6	3069.6	3115.9	3105.3	2982.4	2923.6
65°	1134.7	1155.8	1301.1	1610.0	2067.8	2573.5	3078.5	3211.4	3213.3	3083.6	2986.5
67.5°	755.5	816.2	942.4	1208.1	1688.3	2292.0	2999.9	3227.1	3245.6	3118.4	2954.9
70°	368.6	448.5	572.1	785.2	1208.1	1860.5	2794.5	3098.6	3139.8	3016.9	2766.4
72.5°	153.0	178.9	246.3	387.5	693.5	1255.4	2381.8	2750.4	2826.8	2673.1	2325.9
75°	103.2	111.8	140.9	198.7	315.9	619.1	1717.7	2050.8	2173.8	2018.9	1650.3
77.5°	79.5	85.0	102.5	139.0	187.8	234.2	919.4	1235.9	1299.5	1203.0	858.7
80°	62.6	66.8	76.7	101.3	133.2	125.2	313.4	560.0	596.7	500.6	276.0
82.5°	54.3	55.9	54.9	68.7	88.5	73.2	102.9	206.7	228.1	165.5	90.1
85°	39.3	43.8	45.7	42.5	47.0	37.1	42.2	73.2	80.5	71.9	50.8
87.5°	16.0	23.6	29.1	27.5	17.3	10.5	13.1	21.4	24.6	26.8	16.6
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: P881739
 CATALOG NUMBER: NAV-SB1B-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4	674.4
2.5°	675.0	677.2	678.8	680.7	682.0	683.9	687.8	690.0	690.3	691.9	691.6
5°	681.1	684.3	687.8	692.9	698.6	703.4	710.8	715.9	717.8	719.4	719.1
7.5°	694.2	698.6	705.0	714.0	722.3	728.7	737.6	743.7	749.7	752.0	752.3
10°	713.6	720.0	729.3	741.4	750.4	758.7	768.0	773.1	779.1	781.7	783.0
12.5°	737.9	744.6	756.8	773.7	782.0	787.8	791.0	789.7	791.0	793.2	793.8
15°	765.7	773.1	786.8	805.0	810.8	805.6	798.6	792.2	791.3	791.9	794.1
17.5°	798.6	804.0	820.0	835.4	831.2	810.1	794.8	784.6	779.5	777.9	780.1
20°	844.6	844.6	857.7	867.3	839.5	803.7	779.8	763.2	752.6	748.1	747.2
22.5°	900.5	895.4	903.7	897.0	837.9	785.8	752.6	723.9	707.9	701.5	700.5
25°	971.4	965.4	963.1	921.6	826.4	757.4	703.4	668.6	654.5	651.0	651.7
27.5°	1078.5	1063.1	1034.0	935.0	805.3	712.7	645.9	613.7	605.7	606.0	606.9
30°	1220.9	1190.3	1119.0	937.3	770.8	649.4	587.1	564.1	560.3	561.9	567.3
32.5°	1352.9	1323.8	1205.9	927.0	717.8	587.5	534.4	519.1	513.4	515.3	517.8
35°	1456.4	1448.4	1286.4	912.7	652.6	529.3	487.2	474.1	462.9	460.3	462.2
37.5°	1554.1	1550.9	1346.8	892.5	588.1	488.1	449.1	431.9	415.6	406.7	407.0
40°	1661.4	1658.2	1386.4	861.5	530.9	452.3	415.0	392.3	372.2	355.9	357.5
42.5°	1782.2	1763.3	1405.2	817.1	482.4	422.0	387.2	356.5	330.0	315.0	315.9
45°	1914.1	1871.6	1404.9	760.6	441.5	394.2	357.5	314.0	289.4	275.4	274.7
47.5°	2054.0	1975.1	1387.7	698.0	401.9	363.5	311.5	278.2	261.9	253.3	251.4
50°	2198.4	2071.9	1358.3	626.1	361.3	328.7	282.7	260.0	247.6	239.6	236.7
52.5°	2334.2	2159.8	1322.8	544.7	320.1	294.8	269.9	252.4	239.3	230.3	226.5
55°	2460.4	2235.5	1272.7	461.3	286.5	272.2	263.9	249.2	234.2	223.6	219.5
57.5°	2572.5	2284.7	1186.1	383.0	262.6	256.5	257.5	243.7	226.5	217.5	211.8
60°	2665.8	2320.8	1058.0	310.5	243.1	241.2	247.6	233.5	213.4	203.2	198.7
62.5°	2721.7	2320.1	900.8	254.3	226.5	227.1	234.5	220.7	200.3	190.7	187.8
65°	2716.9	2263.3	728.3	217.5	210.5	211.2	220.7	206.7	189.4	183.7	183.4
67.5°	2620.7	2124.6	558.7	193.6	192.9	195.8	207.0	197.1	182.7	182.1	183.0
70°	2360.4	1836.8	402.5	174.4	174.7	178.9	193.6	191.0	179.2	180.5	180.2
72.5°	1892.7	1400.5	270.3	154.3	154.6	161.3	180.8	186.2	175.7	192.6	195.2
75°	1260.5	873.4	173.8	132.9	133.2	141.8	169.6	177.0	166.1	192.0	193.6
77.5°	605.7	392.6	125.9	111.8	111.8	119.8	146.6	158.4	141.5	149.2	136.7
80°	209.2	147.6	99.0	90.1	88.2	93.6	123.6	137.4	122.0	112.4	105.4
82.5°	82.4	76.7	79.5	70.0	63.6	67.1	96.2	113.4	89.8	81.1	80.8
85°	47.3	49.8	56.2	46.3	36.7	41.2	70.6	81.5	67.7	59.7	61.0
87.5°	12.8	17.6	25.9	24.0	16.6	17.6	33.5	45.0	39.0	30.0	31.0
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)