

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: P881893

Luminaire Tested: **NAV-SB1C-735-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-735-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5232 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

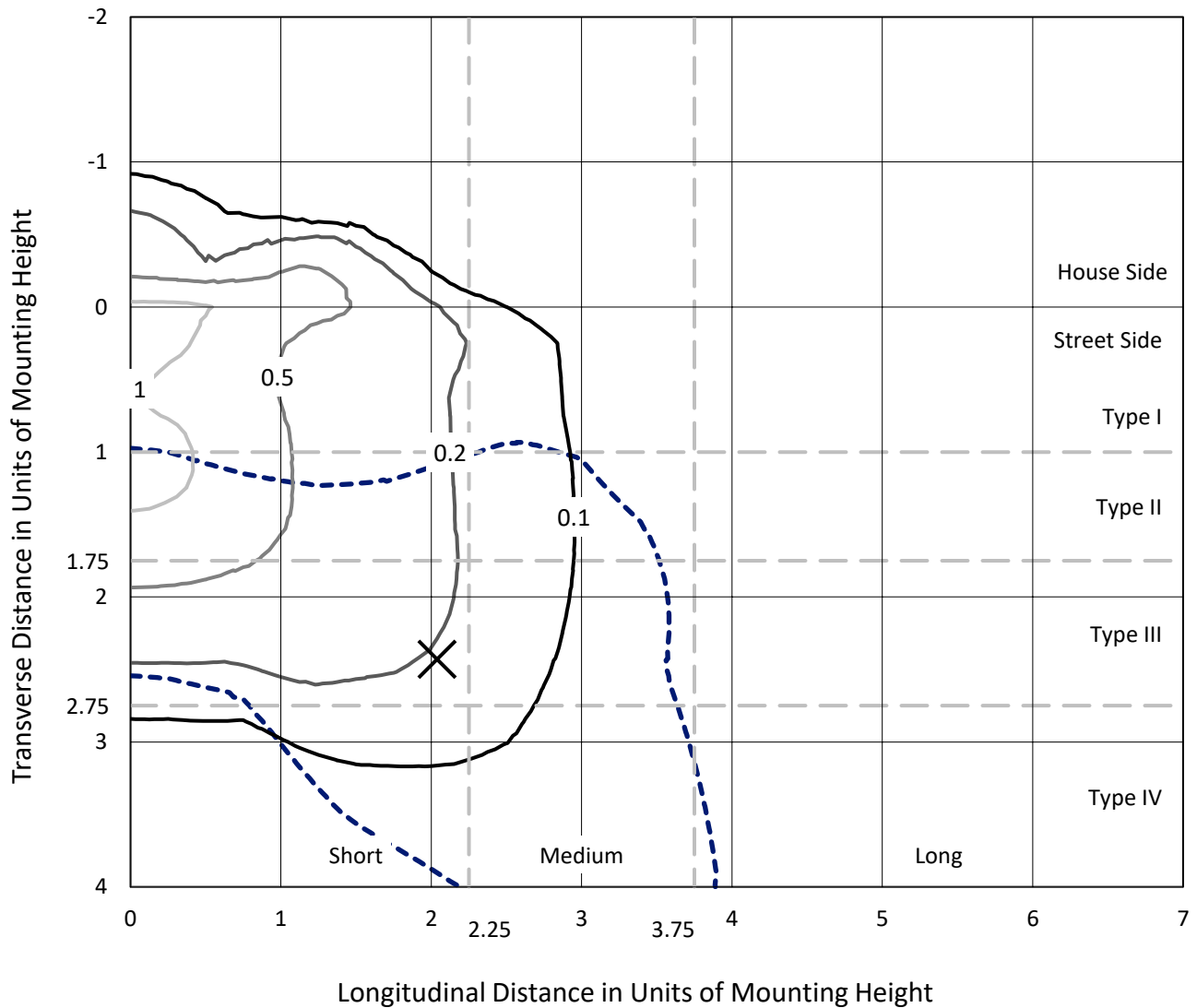
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881893
 CATALOG NUMBER: NAV-SB1C-735-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

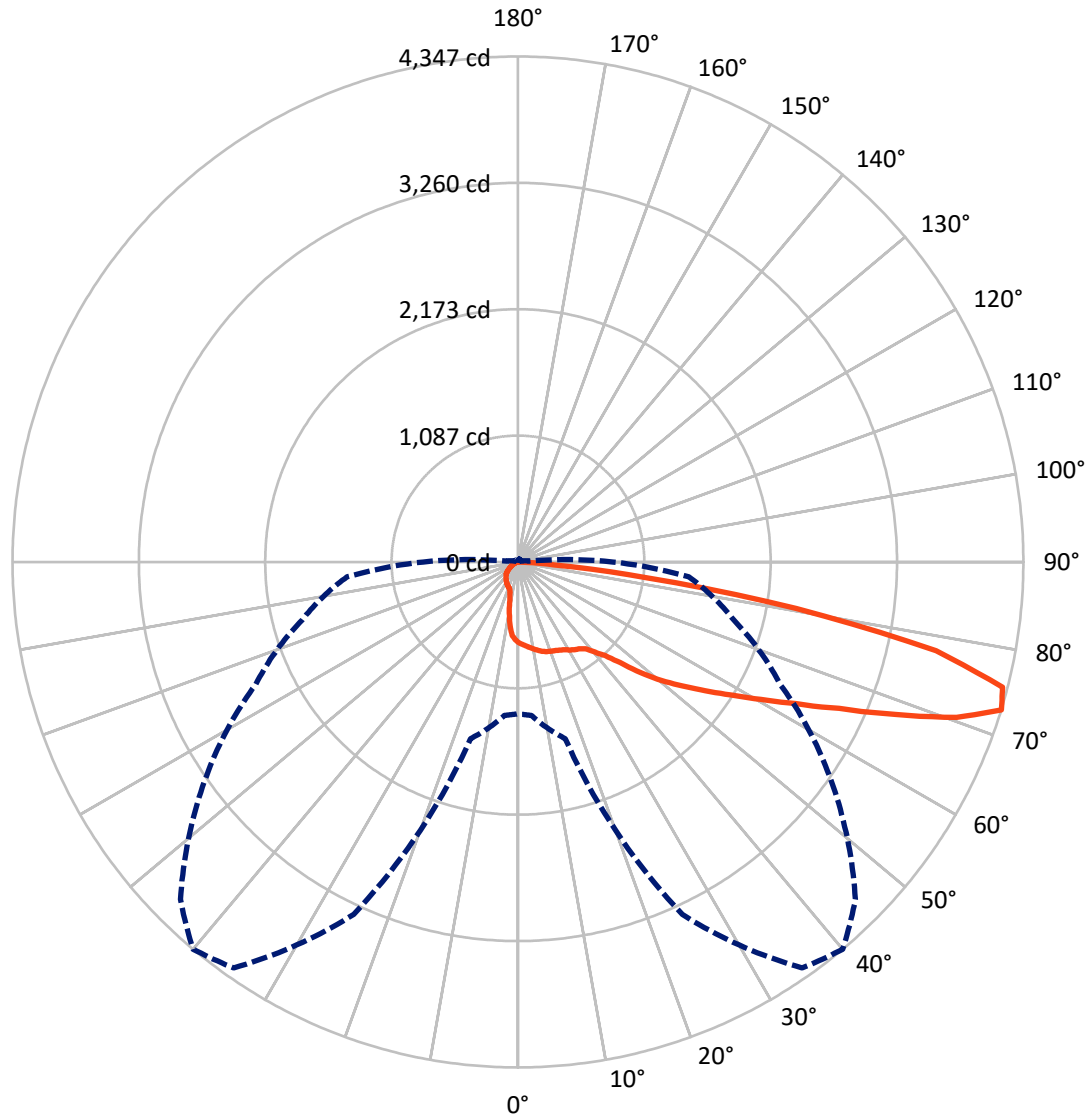
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P881893
CATALOG NUMBER: NAV-SB1C-735-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P881893
 CATALOG NUMBER: NAV-SB1C-735-U-SL4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	675.7	0.0	675.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	4556.4	0.0	4556.4
	% Fixture	87.1	0.0	87.1
Total	Lumens	5232.0	0.0	5232.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	1.2
10°-20°	171.8	3.3
20°-30°	278.0	5.3
30°-40°	410.4	7.8
40°-50°	690.8	13.2
50°-60°	1072.6	20.5
60°-70°	1342.1	25.7
70°-80°	1098.8	21.0
80°-90°	104.2	2.0
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°	5232.0	100.0
0°-180°	5232.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881893

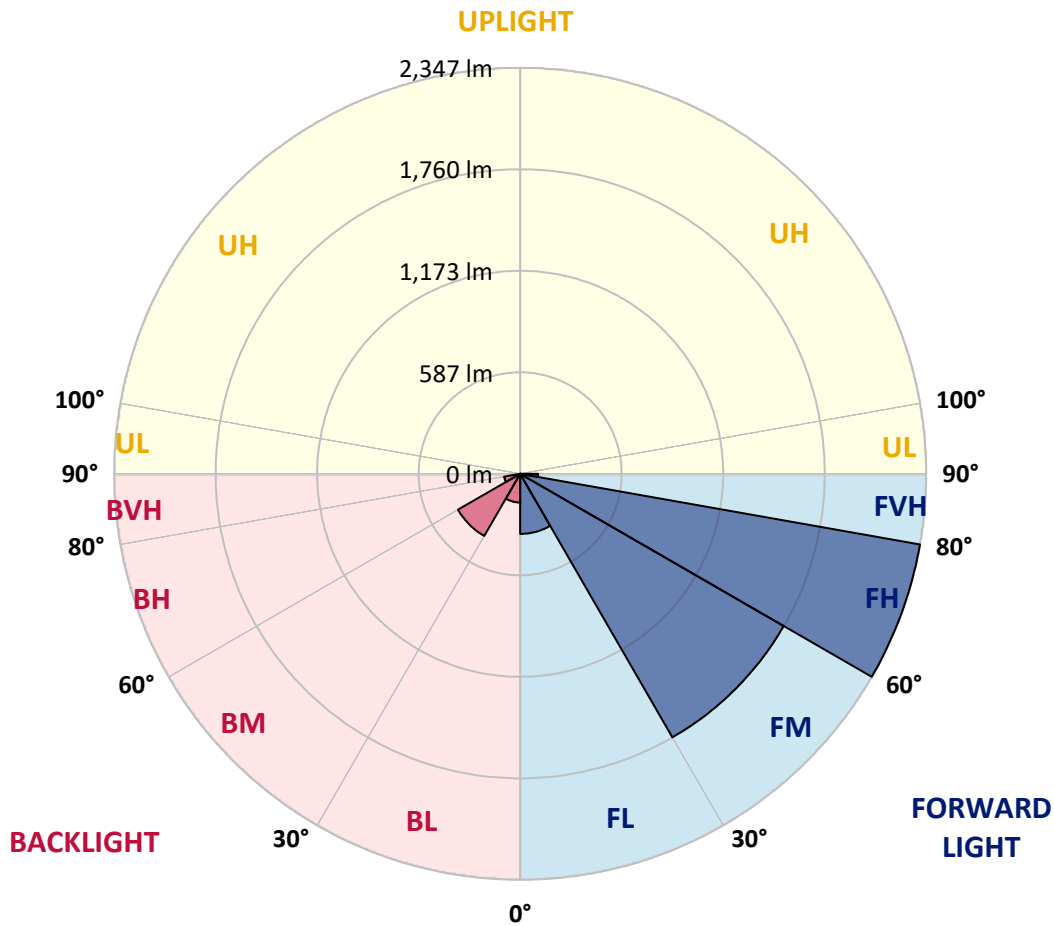
CATALOG NUMBER: NAV-SB1C-735-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	347.3	6.6			
FM (30°-60°)	1758.9	33.6			
FH (60°-80°)	2346.8	44.9			G2/5000
FVH (80°-90°)	103.4	2.0			G2/225
BL (0°-30°)	165.8	3.2	B1/500		
BM (30°-60°)	414.9	7.9	B1/1000		
BH (60°-80°)	94.1	1.8	B0/110		G0/110
BVH (80°-90°)	0.8	0.0			G0/10
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 Short



REPORT NUMBER: P881893

CATALOG NUMBER: NAV-SB1C-735-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8
2.5°	713.6	716.4	714.8	711.7	710.9	709.3	707.3	706.6	703.8	701.4	698.7
5°	733.7	736.5	734.5	730.2	728.2	726.3	723.5	721.1	715.6	710.5	704.2
7.5°	755.8	758.2	755.8	749.5	746.4	744.0	740.0	736.5	730.2	722.7	714.8
10°	780.2	782.2	778.7	770.4	765.3	761.7	758.2	754.2	748.3	740.0	730.6
12.5°	803.1	805.5	799.9	790.1	784.2	780.6	776.7	773.5	767.6	759.7	749.9
15°	824.0	827.5	818.1	807.4	800.7	798.0	794.0	792.1	788.1	782.6	773.5
17.5°	839.7	842.1	832.3	819.6	812.2	810.2	807.4	808.6	807.8	805.1	799.2
20°	853.1	854.7	841.7	826.3	818.1	818.5	817.7	821.6	823.2	823.2	822.8
22.5°	869.7	870.1	853.5	834.2	824.4	827.1	828.3	832.7	835.8	839.0	846.0
25°	891.4	890.6	870.9	844.5	835.8	839.7	842.5	844.1	847.6	852.7	868.9
27.5°	923.7	921.3	896.1	861.0	850.8	854.3	859.4	858.7	857.1	861.0	888.2
30°	964.7	961.5	928.0	884.3	874.8	878.0	879.5	872.5	861.0	864.6	905.2
32.5°	1029.7	1024.2	977.7	910.3	895.7	899.2	897.3	882.7	865.8	869.3	922.1
35°	1142.8	1129.4	1063.6	964.7	919.3	915.4	910.7	896.5	875.6	872.1	936.3
37.5°	1383.2	1359.5	1247.2	1070.7	972.9	947.3	932.7	918.6	886.2	872.1	952.4
40°	1654.3	1630.2	1500.6	1248.0	1062.0	1018.6	984.0	944.6	897.3	877.2	977.7
42.5°	1937.2	1910.8	1777.6	1467.9	1189.3	1100.2	1035.6	965.4	915.4	892.9	1011.2
45°	2253.2	2220.1	2046.0	1697.2	1374.1	1235.8	1118.7	1008.4	946.9	920.9	1056.9
47.5°	2586.6	2543.7	2313.5	1919.9	1573.1	1423.3	1270.8	1085.2	993.4	962.7	1118.7
50°	2882.2	2839.6	2589.8	2152.8	1759.1	1601.9	1444.2	1191.6	1063.2	1021.8	1201.9
52.5°	3094.6	3062.2	2841.2	2393.1	1952.6	1769.3	1601.5	1315.4	1151.4	1097.5	1300.0
55°	3236.8	3207.3	3019.3	2620.9	2177.6	1953.8	1756.3	1449.8	1257.8	1188.1	1408.4
57.5°	3323.1	3306.2	3148.2	2824.2	2400.6	2155.5	1933.7	1597.5	1383.2	1294.9	1529.4
60°	3353.9	3340.1	3228.1	3018.1	2670.2	2397.9	2142.1	1764.2	1535.3	1416.3	1653.5
62.5°	3271.9	3274.6	3285.7	3247.9	2954.3	2681.6	2392.0	1964.4	1703.9	1553.8	1770.1
65°	2886.1	2909.0	3118.6	3502.4	3330.6	3037.0	2710.0	2208.7	1897.0	1710.2	1862.7
67.5°	2389.6	2422.7	2683.6	3651.4	3731.8	3498.5	3152.9	2520.0	2127.1	1869.4	1897.8
70°	1829.2	1864.7	2180.7	3620.2	4107.3	4002.9	3700.6	2916.1	2365.5	1979.8	1808.3
72.5°	1305.5	1323.7	1572.7	3343.2	4261.4	4346.5	4104.1	3291.2	2487.3	1918.7	1475.0
75°	917.4	914.2	1079.3	2692.2	4021.4	4304.7	3962.7	3088.3	2250.9	1524.2	909.5
77.5°	399.6	400.4	539.1	1635.0	3209.6	3676.6	3294.0	1934.4	1569.2	807.8	383.8
80°	103.6	106.8	197.8	651.0	1932.5	2426.6	2008.9	850.4	725.1	197.0	73.3
82.5°	36.6	39.0	91.0	204.5	712.9	1112.8	894.5	271.9	189.1	56.4	19.7
85°	10.6	12.6	48.9	62.7	147.4	314.5	217.1	52.8	46.5	29.2	5.1
87.5°	0.0	1.6	9.9	8.7	8.7	5.9	11.0	5.9	7.5	3.5	1.6
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: P881893

CATALOG NUMBER: NAV-SB1C-735-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8	692.8
2.5°	696.3	693.5	687.6	681.3	675.4	669.9	668.3	662.4	659.7	660.1	659.7
5°	699.9	694.7	683.3	669.5	655.3	639.2	625.8	606.9	590.7	588.7	587.5
7.5°	709.3	701.0	682.5	655.7	620.3	575.7	534.3	493.4	470.1	457.5	456.7
10°	723.9	712.9	684.5	633.3	558.0	478.4	415.7	364.1	337.7	325.5	323.1
12.5°	741.2	729.0	687.6	595.0	477.6	373.2	305.4	273.9	268.4	267.6	267.2
15°	765.7	752.3	691.2	543.4	390.5	284.1	253.0	253.4	257.7	260.1	259.7
17.5°	792.9	779.5	686.1	480.4	304.6	242.7	242.0	245.5	251.8	254.2	253.8
20°	820.4	807.8	667.9	406.3	246.3	231.3	234.5	238.4	244.7	247.9	247.9
22.5°	848.8	837.8	639.2	327.5	222.3	223.0	227.0	230.9	238.0	241.6	241.6
25°	879.2	869.7	600.9	262.4	212.0	214.4	219.5	224.2	231.7	236.0	236.0
27.5°	909.9	902.8	557.6	219.1	202.5	205.3	211.2	217.5	225.0	230.1	230.5
30°	943.4	939.4	522.9	202.9	193.5	195.8	202.5	209.6	217.9	224.2	225.0
32.5°	977.7	976.9	506.0	214.8	185.2	186.8	192.7	199.8	210.0	217.9	218.7
35°	1011.6	1013.1	496.1	248.3	182.5	178.1	182.1	188.4	200.6	210.4	212.0
37.5°	1054.9	1058.8	495.7	284.5	189.1	169.4	172.2	176.5	187.2	198.6	200.6
40°	1119.5	1140.4	520.9	315.6	201.0	161.6	162.4	163.1	168.7	178.1	181.3
42.5°	1205.4	1266.5	612.0	336.9	205.7	154.5	151.7	147.4	146.6	151.7	154.5
45°	1312.2	1419.0	772.0	348.7	201.0	146.6	139.1	127.7	123.3	126.9	126.9
47.5°	1437.9	1586.1	961.5	351.5	193.1	136.7	123.3	108.4	104.8	106.0	105.6
50°	1560.5	1711.4	1128.2	328.6	180.1	124.1	106.0	93.4	91.0	91.4	91.4
52.5°	1668.8	1754.4	1175.5	274.7	162.7	108.8	91.0	82.4	80.8	80.8	80.4
55°	1740.6	1707.9	1048.2	210.0	141.1	93.0	78.0	73.7	72.9	72.5	71.7
57.5°	1755.5	1556.5	791.7	151.7	110.3	78.4	69.4	67.0	65.4	63.8	63.0
60°	1701.9	1304.3	504.0	106.0	82.8	67.0	61.5	59.9	56.7	53.6	52.4
62.5°	1586.1	985.2	279.0	73.7	66.6	57.1	54.4	52.4	46.5	41.4	39.8
65°	1430.4	654.9	123.3	57.5	54.4	48.1	46.5	43.7	36.6	30.7	29.6
67.5°	1274.0	377.1	55.6	46.1	43.7	39.4	38.2	36.3	31.1	25.6	24.8
70°	1095.5	191.1	38.2	36.6	33.9	29.9	31.1	30.7	25.6	20.9	20.1
72.5°	815.7	95.0	28.8	27.6	24.4	21.3	25.6	25.2	20.1	15.8	15.0
75°	461.8	46.9	20.9	19.3	14.6	15.8	20.5	19.3	13.8	10.2	9.5
77.5°	183.2	24.0	13.8	11.8	8.7	10.6	15.0	13.0	7.1	4.3	3.9
80°	42.2	11.8	7.1	5.1	3.9	6.3	7.9	4.7	2.0	0.4	0.0
82.5°	11.8	5.1	2.4	2.0	2.0	2.4	2.0	0.8	0.0	0.0	0.0
85°	3.9	2.4	0.8	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
87.5°	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)