

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: P882976

Luminaire Tested: **NAV-SB3A-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882976
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8290 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

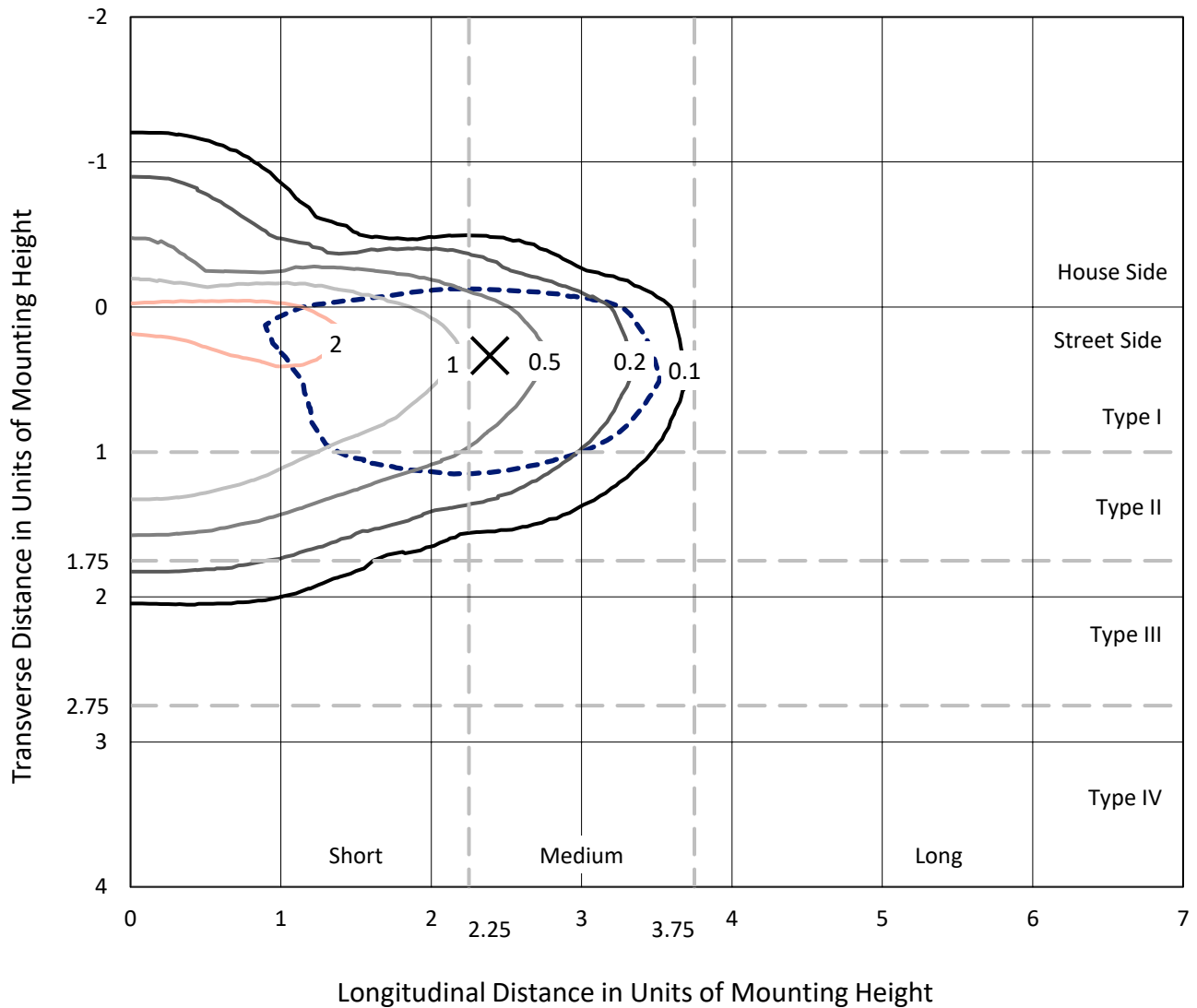
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

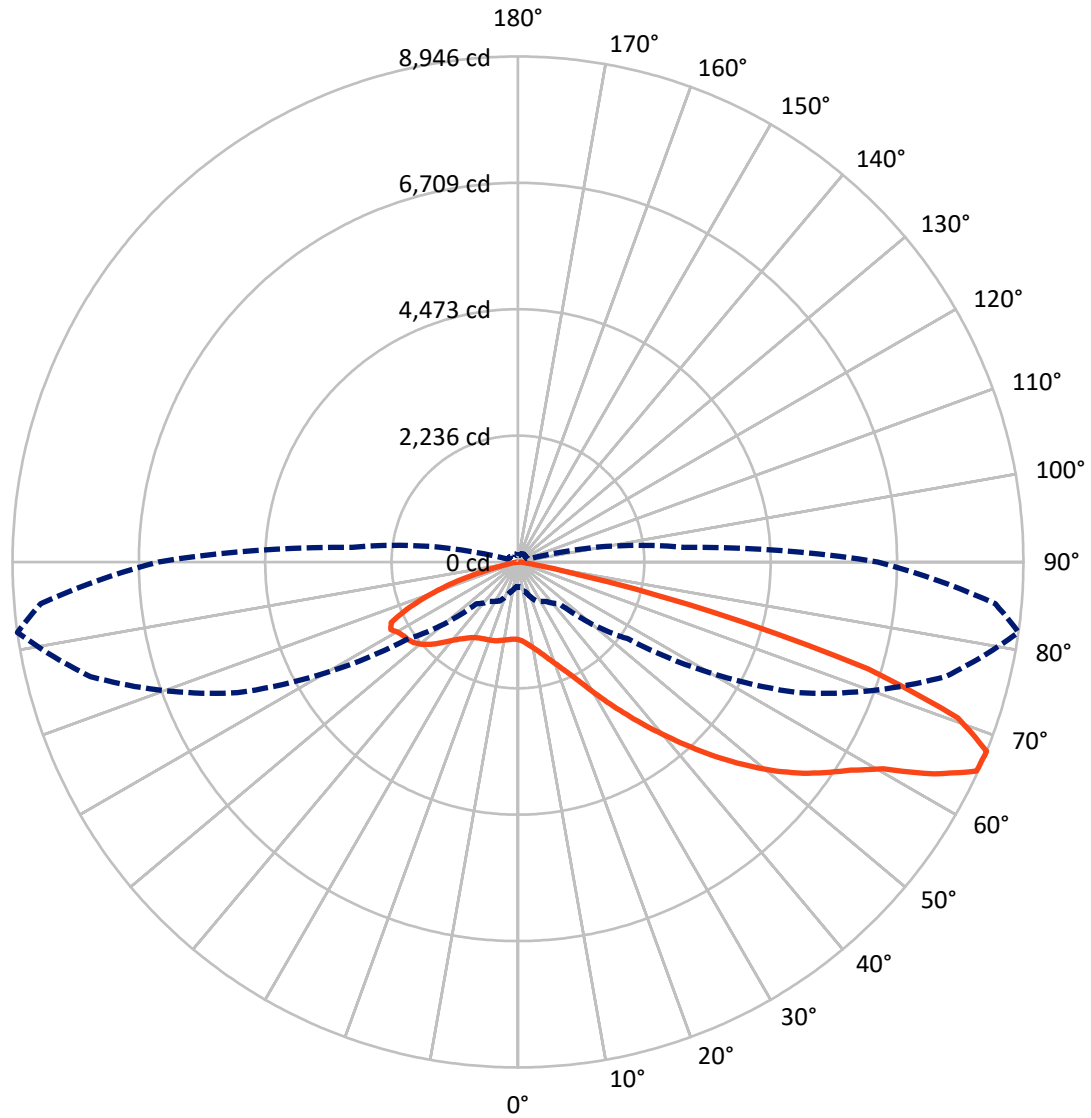
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1501.7	0.0	1501.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	6788.3	0.0	6788.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	8290.0	0.0	8290.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.4	1.5
10°-20°	318.0	3.8
20°-30°	509.3	6.1
30°-40°	900.5	10.9
40°-50°	1577.8	19.0
50°-60°	2104.4	25.4
60°-70°	1959.1	23.6
70°-80°	751.9	9.1
80°-90°	46.7	0.6
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°	8290.0	100.0
0°-180°	8290.0	100.0

Coefficient of Utilization



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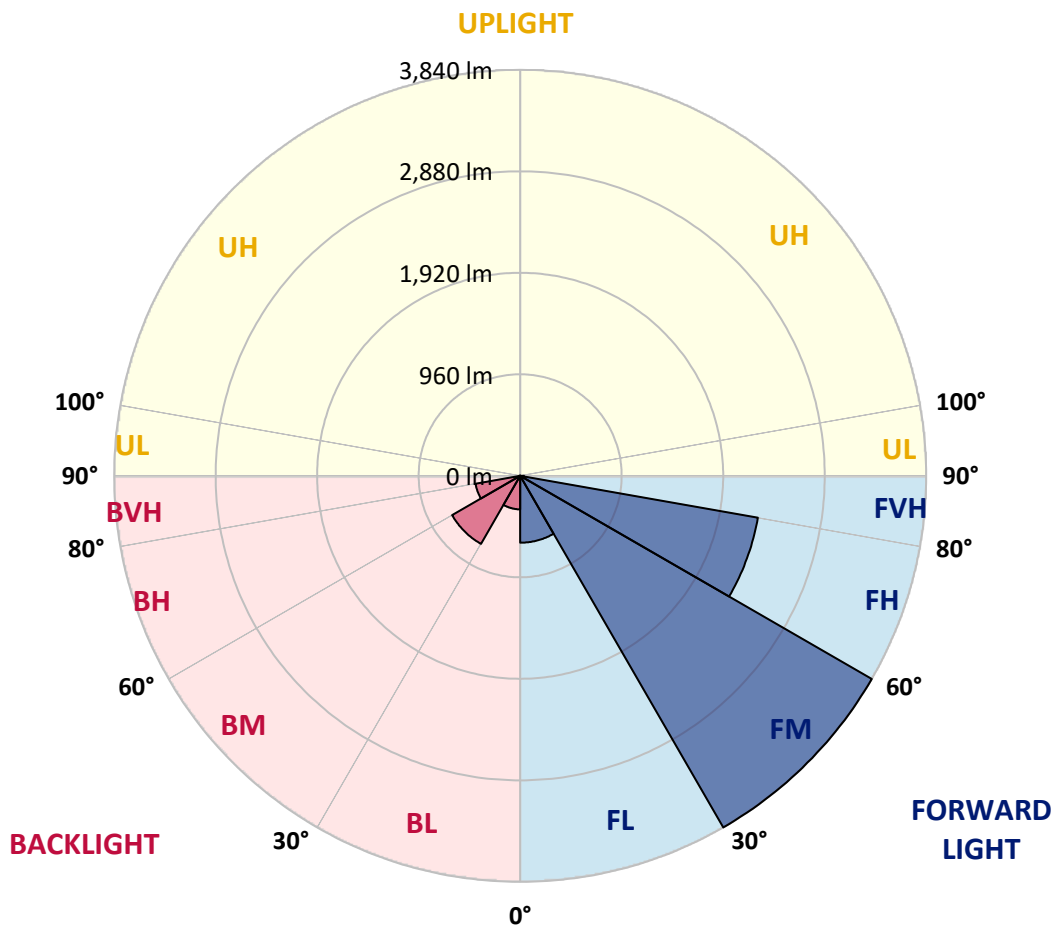
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	632.4	7.6			
FM (30°-60°)	3839.6	46.3			
FH (60°-80°)	2282.4	27.5			G2/5000
FVH (80°-90°)	33.9	0.4			G1/100
BL (0°-30°)	317.1	3.8	B1/500		
BM (30°-60°)	743.2	9.0	B1/1000		
BH (60°-80°)	428.6	5.2	B1/500		G1/500
BVH (80°-90°)	12.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4
2.5°	1451.6	1459.9	1455.1	1452.8	1448.6	1442.6	1437.8	1422.9	1407.4	1397.2	1393.7
5°	1480.8	1489.2	1488.6	1491.0	1493.9	1495.7	1494.5	1477.8	1455.7	1438.4	1428.3
7.5°	1455.7	1465.3	1473.0	1485.0	1505.9	1528.0	1538.7	1535.1	1512.4	1488.6	1476.0
10°	1384.7	1394.9	1413.4	1441.4	1485.6	1533.3	1573.3	1591.8	1577.5	1551.2	1533.9
12.5°	1254.6	1264.7	1301.2	1362.0	1436.0	1519.0	1595.4	1644.9	1648.5	1622.3	1602.0
15°	1108.4	1118.5	1157.3	1233.7	1346.5	1479.6	1607.3	1701.0	1732.7	1710.0	1685.5
17.5°	1017.6	1026.6	1055.8	1117.3	1234.9	1400.8	1603.2	1760.7	1833.0	1815.0	1785.8
20°	990.2	997.9	1011.7	1054.6	1152.5	1319.1	1575.7	1816.8	1941.0	1930.8	1898.0
22.5°	1019.4	1026.6	1030.8	1049.9	1111.4	1265.3	1541.1	1874.1	2066.3	2067.5	2027.5
25°	1086.9	1094.0	1089.3	1101.2	1128.1	1248.6	1528.0	1941.6	2223.9	2237.0	2191.7
27.5°	1197.9	1198.5	1187.2	1186.6	1190.7	1273.7	1541.7	2013.8	2422.7	2447.1	2391.0
30°	1420.5	1411.6	1368.0	1320.8	1299.4	1348.9	1579.9	2099.2	2657.2	2700.8	2630.4
32.5°	1763.7	1750.6	1670.6	1557.8	1444.4	1470.1	1648.5	2196.4	2912.7	2991.5	2905.5
35°	2136.2	2132.6	2049.0	1881.3	1683.1	1642.6	1760.1	2324.2	3191.4	3316.7	3214.7
37.5°	2482.3	2480.5	2432.8	2235.2	1994.1	1883.1	1939.2	2491.3	3489.8	3671.3	3550.7
40°	2798.7	2804.0	2756.3	2579.6	2336.7	2191.7	2182.7	2697.8	3821.7	4057.4	3914.2
42.5°	3072.0	3078.0	3029.7	2898.9	2675.1	2533.1	2481.7	2950.9	4145.8	4472.3	4302.8
45°	3257.7	3294.7	3287.5	3183.0	3022.5	2875.1	2841.0	3268.4	4515.2	4912.1	4713.4
47.5°	3310.2	3344.2	3397.9	3412.2	3314.4	3169.3	3209.9	3651.0	4888.9	5352.6	5126.4
50°	3180.7	3212.3	3323.9	3472.5	3540.6	3495.8	3568.6	4061.0	5271.5	5791.9	5531.7
52.5°	2925.2	2957.4	3098.3	3333.5	3611.0	3751.9	3928.5	4465.1	5642.1	6207.9	5915.5
55°	2555.8	2589.8	2770.6	3036.8	3476.7	3857.5	4228.7	4868.6	5981.7	6582.2	6261.6
57.5°	2053.2	2078.3	2266.3	2638.7	3138.9	3752.5	4450.2	5309.1	6301.6	6949.8	6604.8
60°	1338.2	1360.2	1578.7	1994.1	2579.0	3401.5	4494.3	5800.3	6726.6	7427.9	7067.4
62.5°	889.9	904.8	1034.4	1339.4	1816.2	2727.6	4235.9	6192.4	7349.7	8259.9	7860.6
65°	610.6	625.5	755.0	967.5	1173.4	1804.3	3492.8	6140.5	7914.3	8920.7	8448.5
67.5°	435.7	448.2	558.1	758.6	849.3	1048.1	2367.7	5476.8	7833.2	8945.7	8480.2
70°	312.2	319.3	410.0	590.9	675.0	629.7	1316.7	4188.8	6858.5	8260.5	7834.4
72.5°	218.5	220.8	284.7	450.0	543.7	459.6	626.7	2792.7	5187.3	6483.7	6073.6
75°	148.0	151.0	191.6	330.1	436.3	351.0	331.9	1497.5	3045.2	3588.9	3217.1
77.5°	90.7	91.9	123.5	225.6	326.5	267.4	213.7	634.5	1178.2	1156.7	986.0
80°	51.3	51.3	78.8	140.3	222.6	172.5	149.8	269.8	373.0	327.7	288.9
82.5°	28.6	29.2	57.3	87.1	147.4	102.1	82.4	124.7	161.2	142.6	124.1
85°	11.9	13.1	35.2	41.2	70.4	50.7	33.4	52.5	59.7	53.1	38.8
87.5°	1.2	1.8	10.7	7.8	8.4	10.1	4.8	10.1	8.4	8.4	6.0
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°	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4	1373.4
2.5°	1382.3	1373.4	1350.7	1324.4	1289.8	1273.1	1250.4	1234.9	1221.8	1223.0	1211.0
5°	1409.2	1386.5	1335.8	1272.5	1193.7	1137.6	1077.9	1036.7	1003.3	996.2	980.0
7.5°	1446.2	1410.4	1321.4	1207.4	1074.3	973.5	883.4	825.5	784.3	771.1	758.0
10°	1493.9	1442.0	1302.9	1125.7	934.1	805.8	709.1	663.7	635.7	626.1	618.9
12.5°	1549.4	1478.4	1278.5	1026.0	789.6	666.1	604.6	581.9	573.0	570.0	568.2
15°	1619.3	1523.8	1241.5	907.8	667.3	580.7	554.5	551.5	552.7	551.5	550.9
17.5°	1702.2	1573.3	1181.2	786.1	584.9	537.2	527.6	530.0	533.0	532.4	531.2
20°	1793.0	1622.3	1104.2	678.0	528.8	506.1	500.8	503.2	505.5	504.3	503.7
22.5°	1896.2	1674.8	1018.8	593.9	491.2	477.5	471.5	472.1	472.1	469.7	468.5
25°	2019.8	1732.7	929.3	534.2	462.6	451.8	444.7	442.3	438.7	431.5	430.3
27.5°	2167.2	1794.2	843.4	492.4	439.9	429.7	421.4	415.4	406.5	394.5	393.3
30°	2333.1	1868.8	770.5	466.1	422.0	411.8	402.3	393.3	380.2	365.3	364.1
32.5°	2528.3	1948.7	717.4	448.8	405.9	395.1	383.8	373.0	358.7	343.8	344.4
35°	2761.1	2045.4	686.4	436.9	393.3	379.0	366.5	354.5	343.8	330.7	329.5
37.5°	3013.5	2148.1	676.8	430.9	385.0	362.9	348.6	340.2	339.0	331.3	330.7
40°	3289.9	2269.9	684.0	427.4	376.0	347.4	331.9	330.1	333.0	319.3	319.9
42.5°	3582.3	2414.3	695.9	423.2	363.5	331.9	316.9	316.9	314.5	295.4	295.4
45°	3898.7	2580.8	707.9	413.0	348.6	316.3	305.0	300.8	290.7	272.2	271.6
47.5°	4217.4	2750.3	716.8	394.5	330.7	303.2	293.1	283.5	268.6	251.9	251.3
50°	4520.0	2902.5	707.3	367.1	310.4	290.7	279.9	266.8	250.7	239.3	237.5
52.5°	4790.4	3034.4	666.7	334.8	288.9	277.5	268.0	254.3	241.1	229.2	228.0
55°	5025.6	3141.3	595.1	304.4	269.8	266.2	256.6	239.3	221.4	211.3	210.1
57.5°	5251.2	3222.4	505.5	279.3	252.5	253.7	239.3	223.8	207.1	196.4	195.2
60°	5551.4	3331.1	414.8	256.1	234.0	237.5	222.0	210.7	189.8	176.1	174.3
62.5°	6031.3	3500.0	329.5	227.4	212.5	213.7	207.1	193.4	168.3	152.2	151.0
65°	6412.1	3437.9	259.6	196.4	188.0	189.8	189.8	174.9	148.0	129.5	127.7
67.5°	6369.1	2943.7	207.1	165.9	164.7	165.9	170.1	157.6	131.3	116.4	114.0
70°	5867.1	2341.5	165.9	137.9	143.2	140.3	152.2	143.8	118.2	103.3	101.5
72.5°	4787.4	1686.7	126.5	114.0	109.8	114.6	137.3	129.5	98.5	81.8	80.0
75°	2797.5	900.1	94.3	90.1	79.4	95.5	121.8	110.4	75.2	60.3	58.5
77.5°	910.8	313.9	69.2	66.3	59.1	77.0	103.9	93.1	61.5	47.7	46.0
80°	244.1	94.9	47.2	43.6	38.2	57.3	82.4	74.0	44.2	31.0	30.4
82.5°	97.9	40.0	27.5	24.5	20.9	39.4	65.1	59.7	32.8	19.7	19.7
85°	31.6	13.1	10.1	7.8	9.5	24.5	38.8	40.6	23.3	10.1	7.8
87.5°	4.2	1.8	1.8	2.4	1.8	4.2	11.9	11.3	6.6	1.2	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)