

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: P881897

Luminaire Tested: **NAV-SB1C-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7427 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

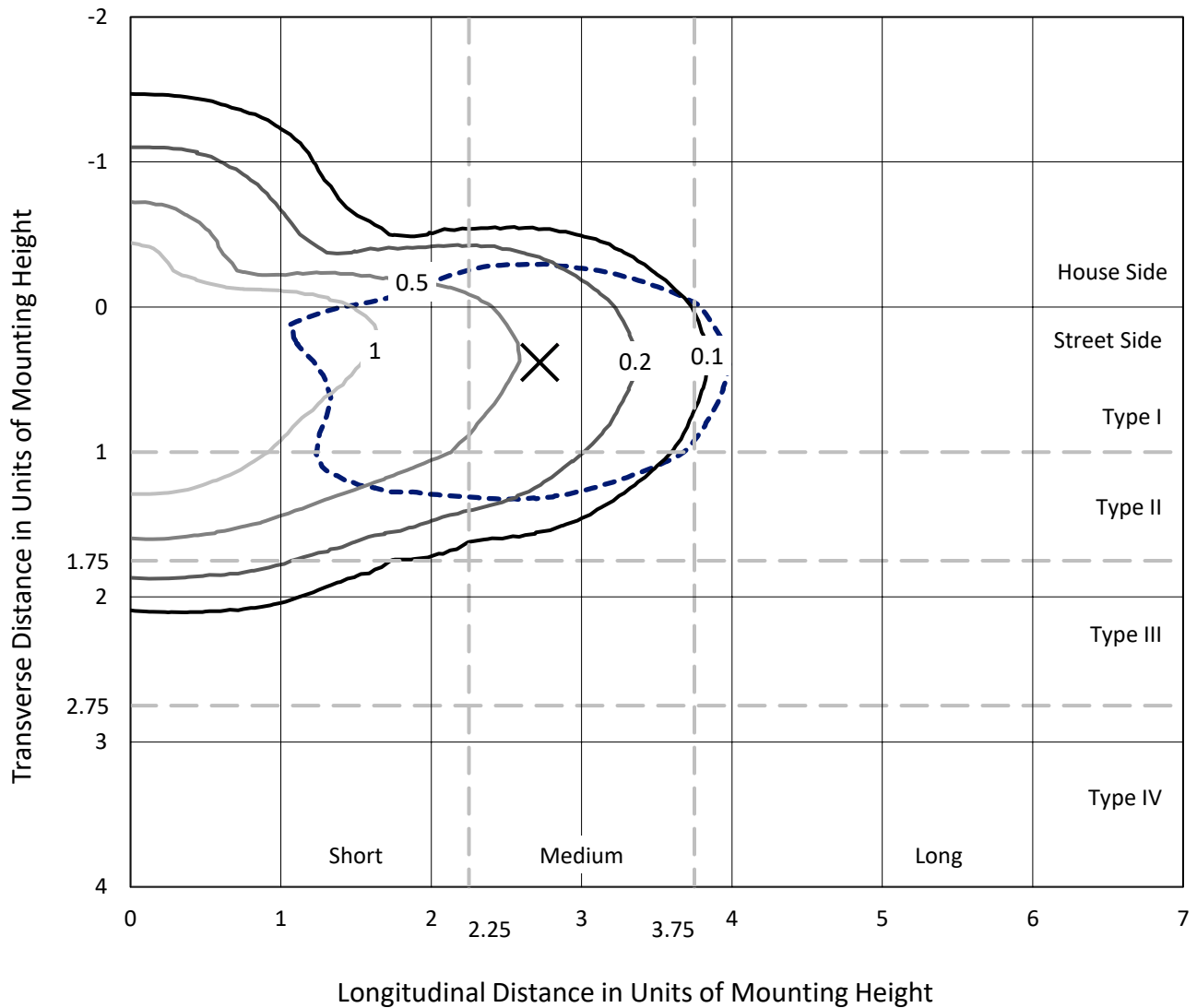
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881897
 CATALOG NUMBER: NAV-SB1C-735-U-T2

Iso-Footcandle Lines of Horizontal Illumination

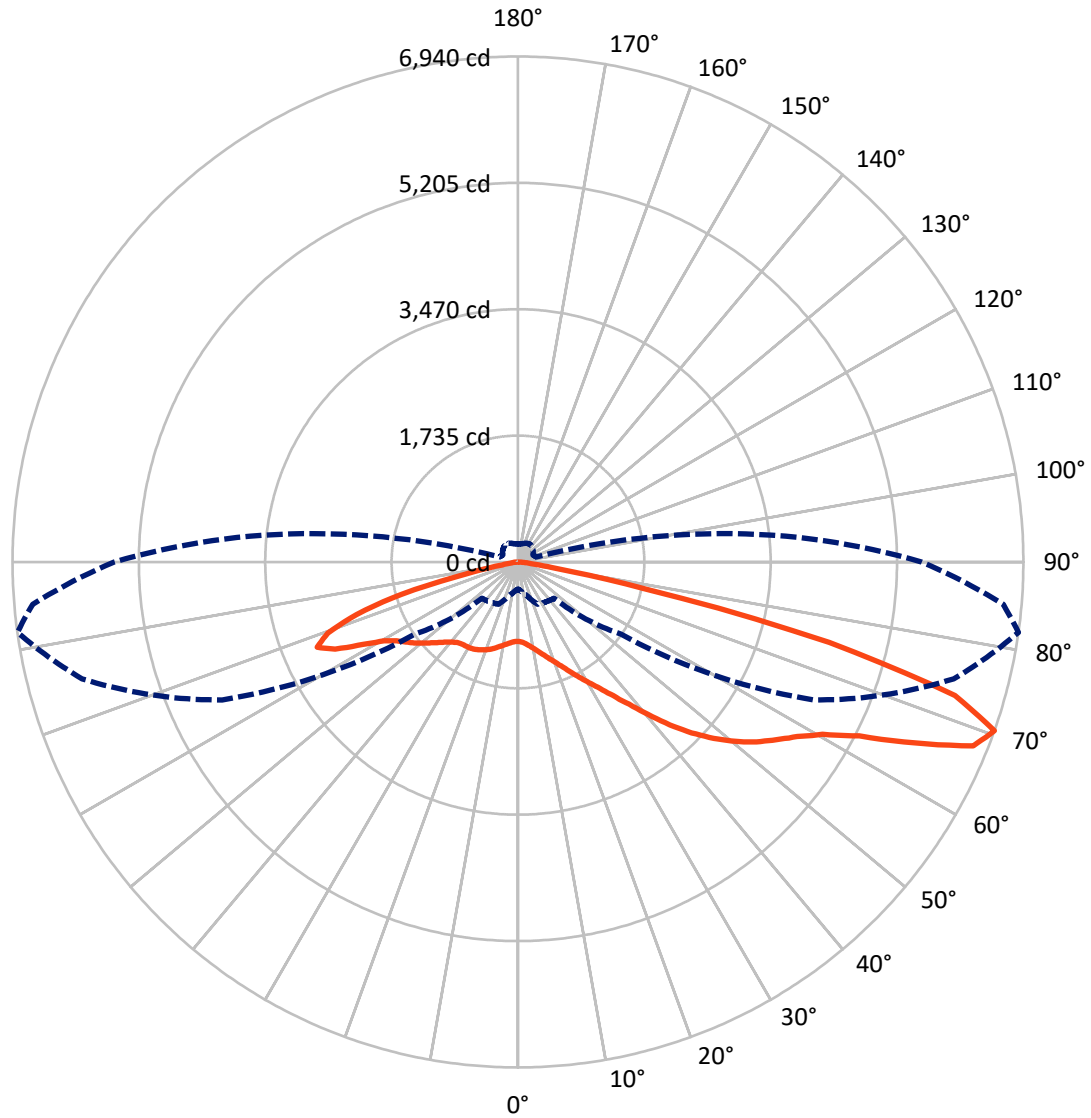
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P881897
CATALOG NUMBER: NAV-SB1C-735-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P881897
 CATALOG NUMBER: NAV-SB1C-735-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1830.9	0.0	1830.9
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	5596.1	0.0	5596.1
	% Fixture	75.3	0.0	75.3
Total	Lumens	7427.0	0.0	7427.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	1.4
10°-20°	295.4	4.0
20°-30°	494.1	6.7
30°-40°	772.0	10.4
40°-50°	1229.5	16.6
50°-60°	1710.9	23.0
60°-70°	1789.7	24.1
70°-80°	935.4	12.6
80°-90°	97.1	1.3
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°	7427.0	100.0
0°-180°	7427.0	100.0

Coefficient of Utilization



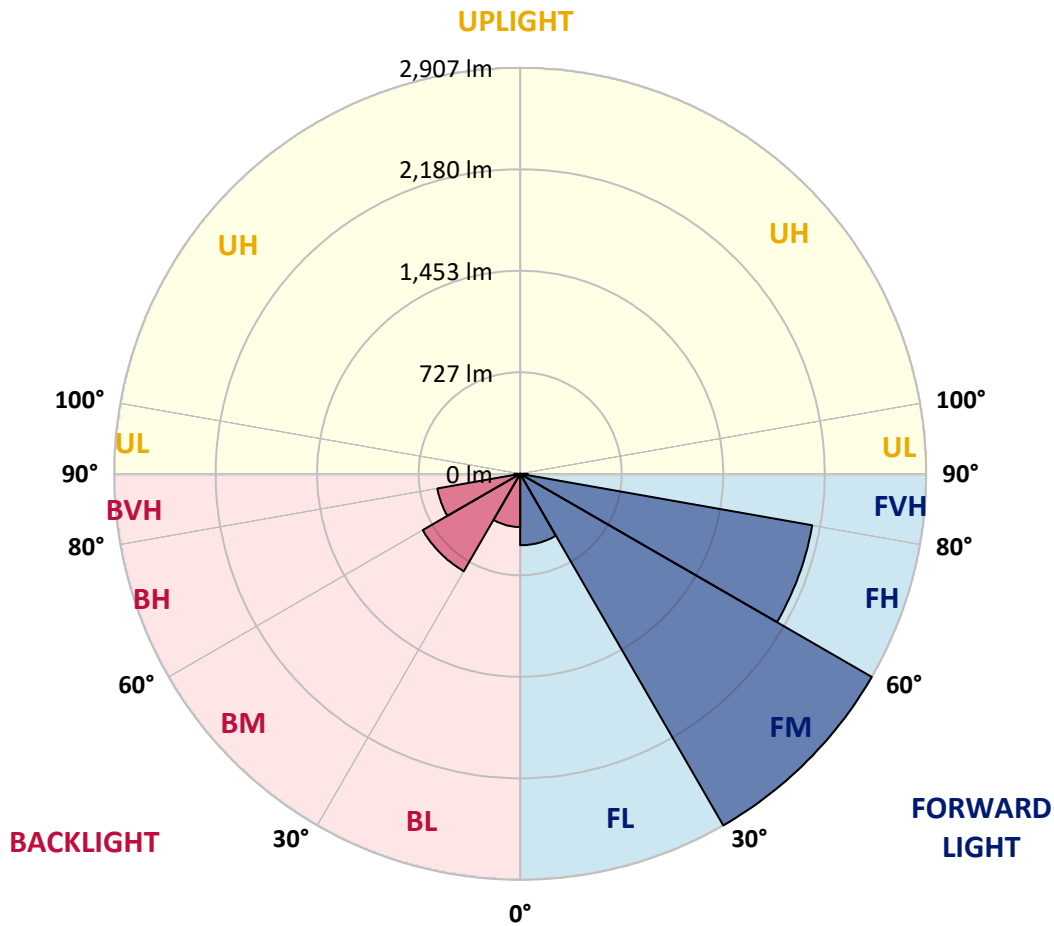
REPORT NUMBER: P881897
 CATALOG NUMBER: NAV-SB1C-735-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	511.4	6.9			
FM (30°-60°)	2906.9	39.1			
FH (60°-80°)	2123.4	28.6			G2/5000
FVH (80°-90°)	54.4	0.7			G1/100
BL (0°-30°)	380.9	5.1	B1/500		
BM (30°-60°)	805.5	10.8	B1/1000		
BH (60°-80°)	601.7	8.1	B2/1000		G2/1000
BVH (80°-90°)	42.8	0.6			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 II Medium



REPORT NUMBER: P881897
 CATALOG NUMBER: NAV-SB1C-735-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9
2.5°	1114.9	1121.2	1119.2	1117.3	1117.3	1114.5	1114.1	1110.2	1107.0	1101.9	1100.7
5°	1129.1	1135.8	1135.0	1136.6	1141.7	1142.9	1144.1	1141.7	1135.4	1129.1	1126.3
7.5°	1116.5	1124.0	1126.3	1135.8	1151.6	1165.7	1176.4	1180.7	1174.8	1165.7	1161.4
10°	1073.9	1082.2	1090.5	1112.9	1140.9	1174.4	1202.8	1219.7	1218.5	1209.9	1202.4
12.5°	987.6	996.3	1014.0	1057.8	1109.0	1168.1	1220.9	1256.4	1268.6	1262.3	1249.3
15°	918.6	926.1	939.5	984.5	1051.1	1140.9	1227.6	1296.6	1327.7	1324.2	1308.4
17.5°	916.7	919.8	928.1	949.4	1000.6	1098.3	1220.5	1336.0	1395.5	1395.1	1375.4
20°	951.4	952.5	957.3	961.6	990.8	1066.0	1202.4	1368.7	1471.6	1471.6	1450.3
22.5°	999.4	998.6	1003.4	999.4	1013.6	1063.3	1191.0	1397.5	1556.3	1562.6	1535.8
25°	1071.6	1067.6	1066.4	1057.4	1060.1	1088.9	1203.6	1430.2	1656.8	1669.8	1636.3
27.5°	1167.7	1161.4	1157.1	1136.2	1129.1	1141.7	1242.2	1469.6	1768.7	1791.2	1748.6
30°	1293.0	1281.6	1275.3	1239.0	1213.4	1215.4	1300.5	1522.0	1885.8	1922.0	1868.0
32.5°	1464.1	1446.3	1429.4	1369.9	1323.0	1307.6	1375.8	1594.5	2012.7	2070.6	2001.2
35°	1655.6	1641.4	1623.3	1531.5	1459.3	1423.9	1477.5	1695.8	2161.2	2253.1	2162.8
37.5°	1840.0	1827.8	1836.5	1712.7	1619.7	1568.1	1610.7	1831.8	2344.5	2480.1	2365.4
40°	2030.8	2021.3	2022.5	1904.3	1795.9	1738.0	1772.3	2002.4	2554.5	2750.0	2608.9
42.5°	2238.1	2231.0	2207.3	2102.5	1980.7	1926.7	1958.3	2199.5	2780.0	3057.4	2876.1
45°	2470.2	2465.9	2443.8	2323.6	2184.1	2123.4	2166.0	2417.0	3006.6	3346.7	3144.5
47.5°	2670.8	2674.3	2671.6	2570.3	2425.7	2336.6	2387.4	2644.0	3217.4	3618.6	3401.8
50°	2767.4	2785.9	2813.1	2781.5	2691.7	2601.0	2610.9	2863.1	3418.4	3873.6	3648.6
52.5°	2716.9	2752.0	2826.1	2876.5	2911.2	2892.3	2865.9	3080.7	3607.6	4103.7	3881.9
55°	2528.9	2578.2	2701.1	2822.9	2999.9	3137.4	3172.1	3321.8	3792.0	4306.3	4102.6
57.5°	2186.5	2266.5	2376.8	2623.1	2921.0	3256.0	3529.1	3656.4	3987.5	4522.7	4333.5
60°	1599.2	1706.4	1843.6	2210.1	2645.2	3192.6	3833.0	4170.3	4265.3	4802.9	4634.2
62.5°	1023.5	1089.7	1215.8	1561.0	2061.1	2867.5	3926.0	4812.7	4736.3	5262.4	5085.0
65°	700.7	743.3	858.7	1052.6	1332.4	2134.4	3676.9	5294.3	5484.3	5990.7	5855.9
67.5°	509.2	541.5	640.0	809.9	868.2	1263.1	2853.3	5272.2	6211.4	6741.0	6531.4
70°	371.2	394.1	476.9	640.0	668.0	702.7	1728.5	4481.7	6195.6	6940.4	6689.4
72.5°	275.1	290.8	346.4	496.6	540.7	474.5	855.6	3257.2	5323.9	6277.6	6076.2
75°	199.0	210.8	251.8	379.9	432.7	361.4	426.8	1903.5	3713.6	4415.9	4451.3
77.5°	152.1	161.2	188.0	278.2	346.4	271.1	264.8	875.7	1760.8	1769.5	1868.8
80°	122.2	128.1	142.7	195.9	265.6	203.0	172.6	353.5	556.5	470.9	494.2
82.5°	89.9	99.7	120.6	137.5	190.0	139.9	105.2	178.5	211.6	182.1	183.6
85°	51.2	57.9	72.9	98.5	121.4	85.5	60.3	79.2	98.5	80.8	72.1
87.5°	18.1	23.6	25.6	38.6	52.8	35.5	23.3	22.9	32.3	24.0	20.1
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: P881897
 CATALOG NUMBER: NAV-SB1C-735-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9	1088.9
2.5°	1096.8	1094.8	1086.9	1076.3	1065.2	1054.6	1051.1	1043.6	1038.4	1035.7	1038.8
5°	1118.8	1112.5	1094.0	1070.4	1045.5	1018.7	999.8	982.5	969.9	958.1	962.8
7.5°	1150.4	1139.3	1107.4	1066.0	1021.9	977.4	944.3	919.0	902.1	891.1	893.4
10°	1187.0	1170.1	1121.2	1059.3	991.2	927.3	888.3	866.6	856.0	850.1	851.6
12.5°	1229.2	1205.1	1135.4	1044.0	944.3	871.3	844.6	838.2	838.6	839.0	839.8
15°	1281.2	1247.7	1146.8	1010.5	883.2	828.4	823.7	833.9	844.6	849.7	849.3
17.5°	1339.9	1292.6	1148.8	955.3	823.3	800.8	815.8	837.9	854.0	861.1	862.7
20°	1403.0	1338.4	1134.6	877.3	774.0	778.3	805.1	833.5	851.3	860.3	862.7
22.5°	1475.1	1387.2	1100.7	795.3	733.8	753.9	785.4	813.0	831.5	840.6	843.0
25°	1557.5	1442.0	1047.5	726.3	699.1	726.3	757.8	780.7	795.7	804.0	806.3
27.5°	1648.9	1499.1	976.6	671.5	668.8	697.9	724.0	741.7	749.6	755.9	758.2
30°	1740.7	1551.2	890.7	630.2	642.4	670.0	688.5	696.4	698.7	699.9	702.7
32.5°	1840.0	1596.1	800.4	595.9	617.2	642.8	653.8	657.4	646.3	638.8	641.2
35°	1960.2	1644.2	712.1	568.7	592.3	614.4	617.9	614.8	601.8	586.4	587.2
37.5°	2108.8	1704.1	641.6	549.4	569.1	583.7	579.3	578.5	579.7	561.6	562.8
40°	2290.9	1782.1	590.0	534.4	550.2	553.3	541.1	547.8	553.7	526.1	526.9
42.5°	2493.1	1876.3	557.3	524.1	534.4	526.9	508.0	515.5	514.7	478.4	478.0
45°	2699.2	1978.8	545.8	516.7	519.8	504.8	484.0	485.9	469.4	436.7	437.8
47.5°	2904.1	2088.7	552.9	510.4	501.7	484.7	468.6	459.9	435.5	411.0	411.0
50°	3105.1	2204.2	578.9	497.7	476.9	467.0	455.2	439.8	413.8	392.9	391.3
52.5°	3291.5	2320.4	608.1	476.9	445.7	451.6	444.1	426.4	400.8	379.5	379.9
55°	3468.1	2436.7	619.5	448.1	416.6	438.2	433.9	401.2	370.5	353.1	351.5
57.5°	3660.4	2576.6	606.9	411.4	392.9	422.9	406.3	370.1	352.3	339.3	338.1
60°	3926.8	2796.1	579.7	366.1	370.5	400.0	371.6	356.7	337.3	322.8	322.0
62.5°	4369.4	3205.6	536.0	321.2	344.0	366.1	355.1	340.1	320.4	306.2	306.2
65°	5023.6	3774.7	453.6	286.1	314.5	333.0	337.3	322.4	301.9	286.9	287.7
67.5°	5575.3	4131.7	343.3	257.0	284.1	306.2	318.4	303.8	282.2	267.6	268.0
70°	5545.0	3872.4	262.1	228.2	257.3	279.8	295.6	284.1	260.9	247.1	248.3
72.5°	4925.0	3239.5	212.0	199.0	230.2	252.2	271.1	262.5	238.8	225.4	225.4
75°	3618.2	2299.6	169.5	169.5	196.3	223.5	244.3	238.8	217.1	207.7	204.9
77.5°	1525.2	964.8	132.8	140.7	163.2	191.9	217.9	219.9	201.0	212.8	193.1
80°	405.5	266.0	101.3	110.7	128.1	158.4	189.6	188.8	168.3	157.2	146.2
82.5°	154.5	104.8	72.1	78.0	92.6	121.4	150.2	154.9	134.4	116.3	116.3
85°	59.5	44.9	44.5	46.9	54.0	80.4	113.5	117.4	101.3	85.9	88.7
87.5°	15.4	13.4	16.6	15.8	24.8	43.0	65.0	67.4	61.9	35.9	51.2
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)