

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: P882469

Luminaire Tested: **NAV-SB2B-835-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882469  
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-SB2B-835-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

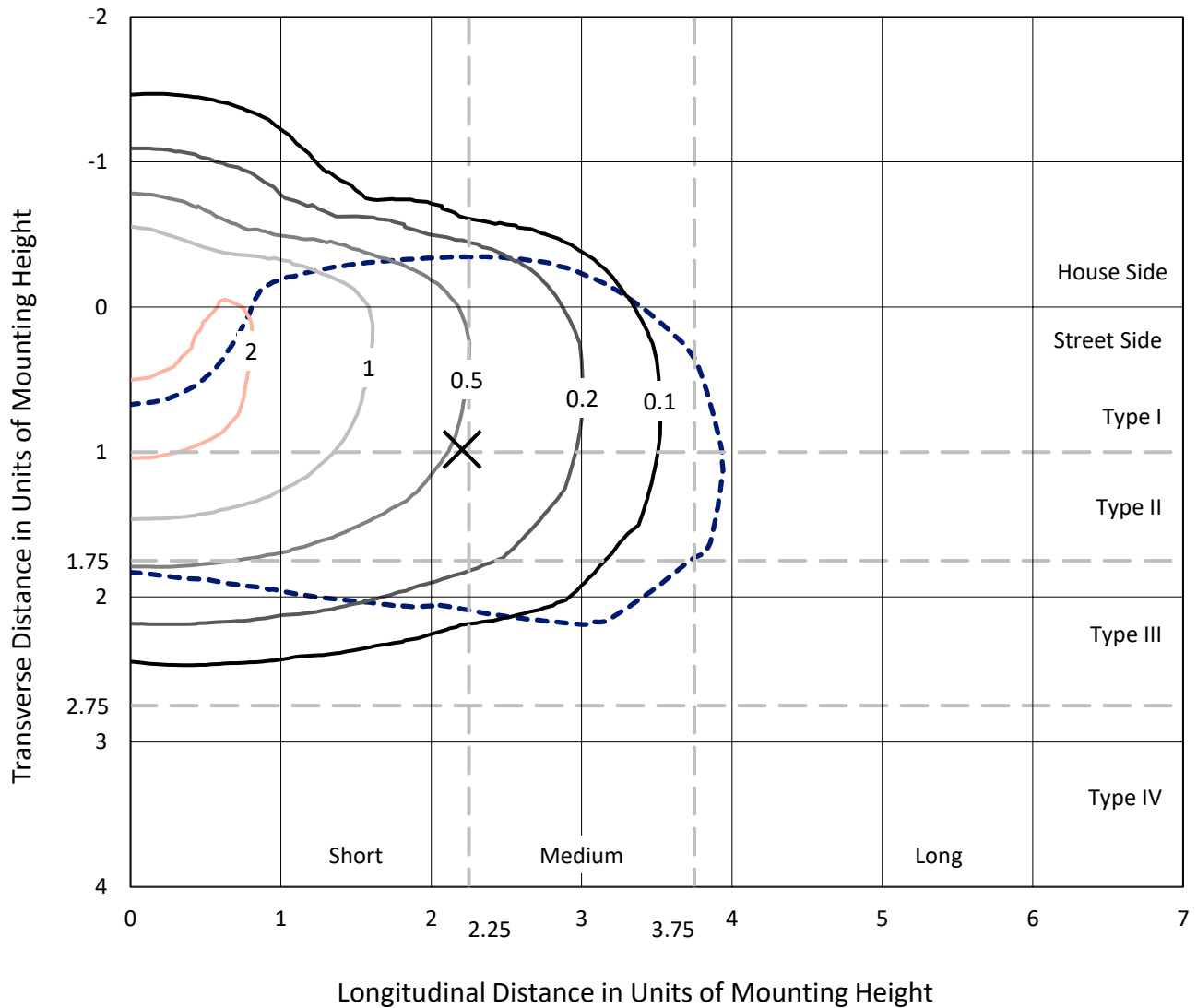
Lumens per Lamp: N/A  
Luminaire Lumens: 9690 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.627  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P882469  
 CATALOG NUMBER: NAV-SB2B-835-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

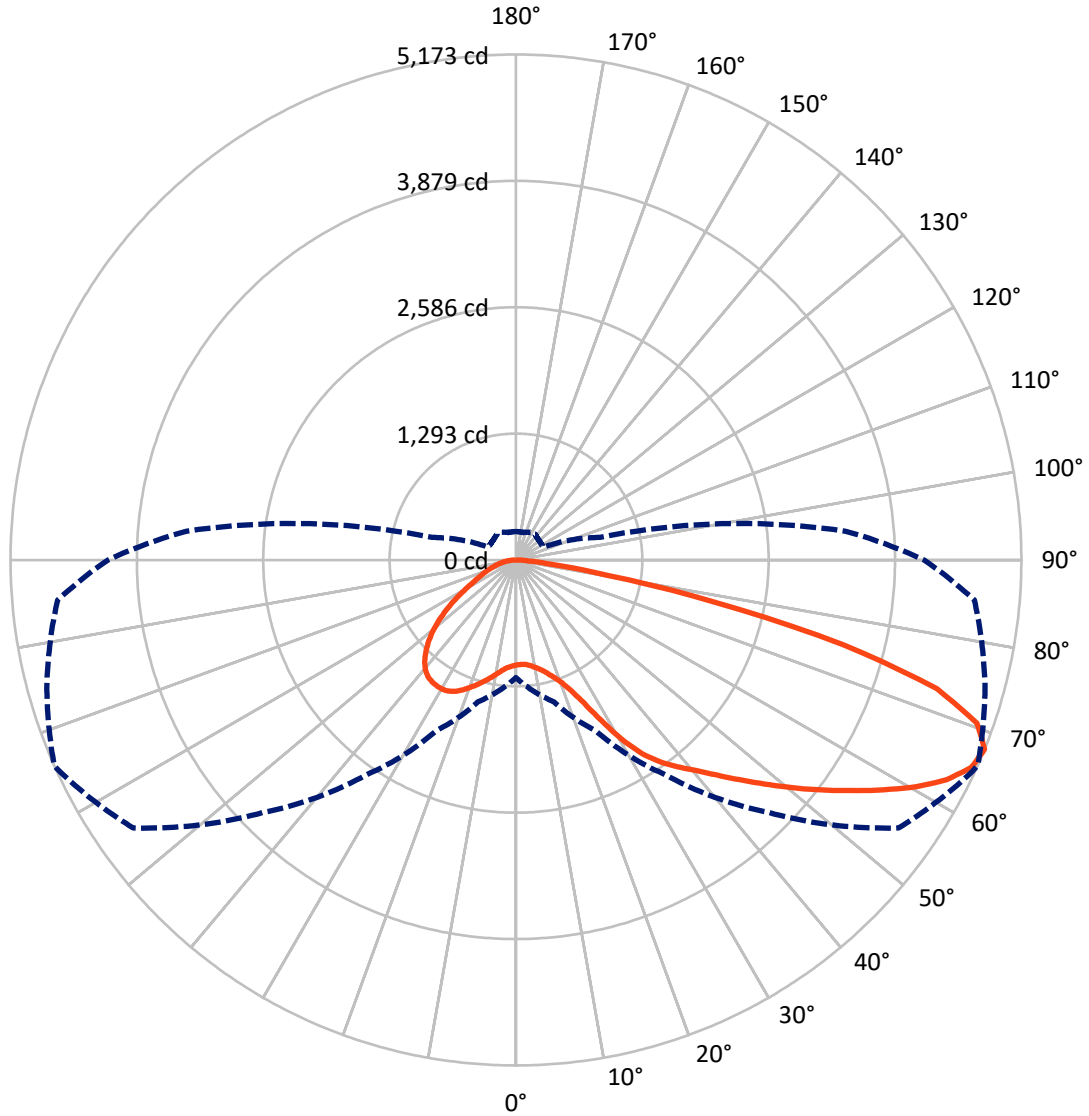
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type III - Short - N/A

REPORT NUMBER: P882469  
CATALOG NUMBER: NAV-SB2B-835-U-T3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P882469  
 CATALOG NUMBER: NAV-SB2B-835-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2409.4	0.0	2409.4
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	7280.6	0.0	7280.6
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	9690.0	0.0	9690.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.6	1.1
10°-20°	352.1	3.6
20°-30°	678.6	7.0
30°-40°	1189.8	12.3
40°-50°	1768.8	18.3
50°-60°	2242.1	23.1
60°-70°	2193.8	22.6
70°-80°	1046.5	10.8
80°-90°	111.8	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°	9690.0	100.0
0°-180°	9690.0	100.0

**Coefficient of Utilization**



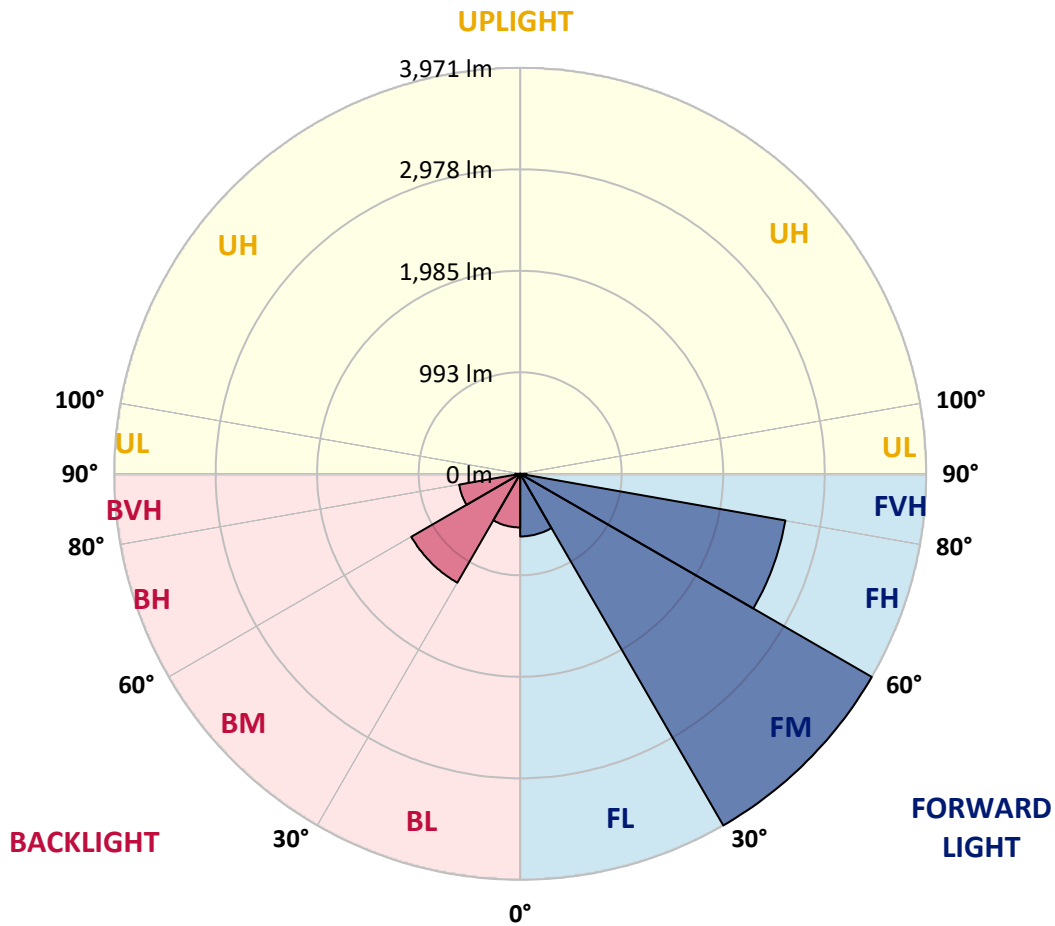
REPORT NUMBER: P882469  
 CATALOG NUMBER: NAV-SB2B-835-U-T3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	612.3	6.3			
FM (30°-60°)	3970.9	41.0			
FH (60°-80°)	2634.0	27.2			G2/5000
FVH (80°-90°)	63.4	0.7			G1/100
BL (0°-30°)	524.9	5.4	B2/1000		
BM (30°-60°)	1229.8	12.7	B2/2500		
BH (60°-80°)	606.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	48.4	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short



REPORT NUMBER: P882469  
 CATALOG NUMBER: NAV-SB2B-835-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7
2.5°	1063.5	1069.7	1068.1	1065.6	1065.1	1066.1	1067.6	1069.1	1068.6	1071.2	1075.3
5°	1060.5	1066.6	1066.1	1066.1	1068.1	1072.2	1074.7	1077.3	1074.7	1077.8	1083.4
7.5°	1062.5	1067.1	1069.1	1071.2	1076.3	1083.9	1090.0	1095.6	1092.6	1096.1	1103.3
10°	1088.5	1092.1	1094.1	1094.1	1097.7	1106.3	1112.4	1122.6	1120.1	1125.7	1134.8
12.5°	1135.8	1139.4	1139.4	1137.4	1139.9	1145.5	1147.6	1158.8	1154.2	1163.3	1172.5
15°	1193.9	1201.0	1195.4	1191.8	1192.9	1198.5	1198.0	1206.6	1202.0	1209.7	1217.8
17.5°	1258.0	1267.2	1258.0	1257.5	1255.5	1261.6	1262.1	1269.7	1261.6	1267.2	1272.8
20°	1333.9	1346.6	1339.0	1341.5	1336.9	1339.5	1342.0	1353.2	1340.5	1344.6	1343.1
22.5°	1440.8	1456.1	1447.9	1457.6	1454.6	1452.5	1452.0	1471.9	1452.0	1453.5	1438.8
25°	1596.6	1614.9	1600.7	1613.9	1613.9	1620.5	1628.2	1653.6	1620.5	1610.9	1572.7
27.5°	1826.7	1845.0	1817.0	1825.2	1822.6	1838.9	1830.8	1893.9	1858.3	1842.5	1765.6
30°	2103.7	2136.3	2083.3	2081.3	2078.7	2104.7	2116.4	2158.2	2122.0	2106.2	2013.6
32.5°	2403.0	2437.2	2374.0	2355.7	2346.0	2361.8	2352.1	2385.7	2360.8	2336.3	2221.8
35°	2719.7	2753.3	2693.2	2657.6	2618.9	2585.8	2551.2	2559.8	2536.4	2499.3	2380.6
37.5°	3019.1	3080.7	3017.0	2978.9	2907.6	2842.9	2746.2	2706.0	2684.1	2650.0	2530.3
40°	3324.0	3359.2	3310.8	3278.2	3200.8	3099.5	2944.7	2859.7	2830.2	2797.1	2695.8
42.5°	3548.6	3582.2	3556.2	3533.8	3473.2	3355.6	3155.5	3049.1	3006.3	2969.2	2883.1
45°	3726.7	3751.7	3735.4	3743.5	3717.6	3603.5	3373.9	3252.2	3208.0	3162.6	3094.9
47.5°	3798.5	3825.0	3851.0	3899.3	3943.6	3859.6	3608.6	3472.2	3425.3	3379.0	3312.3
50°	3790.4	3817.4	3892.7	3995.6	4133.0	4105.0	3856.1	3706.4	3663.1	3610.2	3548.6
52.5°	3725.2	3755.8	3852.5	4023.6	4242.5	4288.8	4108.1	3948.2	3907.5	3844.4	3782.8
55°	3554.2	3572.5	3717.6	3959.9	4268.4	4417.1	4355.0	4205.8	4165.1	4077.0	4009.8
57.5°	3237.0	3263.4	3474.7	3788.4	4203.3	4504.2	4571.9	4476.7	4437.5	4310.7	4240.4
60°	2823.1	2865.3	3107.1	3500.2	4037.3	4503.7	4768.9	4742.9	4710.4	4540.8	4467.5
62.5°	2354.7	2403.5	2636.2	3092.9	3747.1	4375.9	4892.1	4965.9	4949.1	4753.1	4659.5
65°	1808.4	1842.0	2073.6	2566.0	3295.5	4101.5	4906.4	5118.2	5121.2	4914.5	4759.7
67.5°	1204.1	1300.8	1501.9	1925.5	2690.7	3652.9	4781.1	5143.1	5172.6	4970.0	4709.3
70°	587.5	714.8	911.8	1251.4	1925.5	2965.1	4453.8	4938.4	5004.1	4808.1	4409.0
72.5°	243.9	285.1	392.5	617.6	1105.3	2000.8	3796.0	4383.5	4505.2	4260.3	3706.9
75°	164.4	178.2	224.5	316.7	503.5	986.7	2737.5	3268.5	3464.6	3217.6	2630.1
77.5°	126.8	135.4	163.4	221.5	299.4	373.2	1465.2	1969.8	2071.1	1917.3	1368.5
80°	99.8	106.4	122.2	161.4	212.3	199.6	499.4	892.5	951.0	797.8	439.9
82.5°	86.6	89.1	87.6	109.5	141.0	116.6	163.9	329.4	363.5	263.7	143.6
85°	62.6	69.7	72.8	67.7	74.8	59.1	67.2	116.6	128.3	114.6	80.9
87.5°	25.5	37.7	46.3	43.8	27.5	16.8	20.9	34.1	39.2	42.8	26.5
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: P882469  
 CATALOG NUMBER: NAV-SB2B-835-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7	1074.7
2.5°	1075.8	1079.3	1081.9	1084.9	1087.0	1090.0	1096.1	1099.7	1100.2	1102.8	1102.2
5°	1085.4	1090.5	1096.1	1104.3	1113.4	1121.1	1132.8	1140.9	1144.0	1146.5	1146.0
7.5°	1106.3	1113.4	1123.6	1137.9	1151.1	1161.3	1175.6	1185.2	1194.9	1198.5	1199.0
10°	1137.4	1147.6	1162.3	1181.7	1195.9	1209.2	1223.9	1232.1	1241.7	1245.8	1247.8
12.5°	1176.1	1186.8	1206.1	1233.1	1246.3	1255.5	1260.6	1258.5	1260.6	1264.1	1265.2
15°	1220.4	1232.1	1254.0	1283.0	1292.1	1284.0	1272.8	1262.6	1261.1	1262.1	1265.7
17.5°	1272.8	1281.5	1306.9	1331.3	1324.7	1291.1	1266.7	1250.4	1242.2	1239.7	1243.3
20°	1346.1	1346.1	1367.0	1382.3	1338.0	1280.9	1242.8	1216.3	1199.5	1192.4	1190.8
22.5°	1435.2	1427.1	1440.3	1429.6	1335.4	1252.4	1199.5	1153.7	1128.2	1118.0	1116.5
25°	1548.2	1538.6	1535.0	1468.8	1317.1	1207.1	1121.1	1065.6	1043.2	1037.6	1038.6
27.5°	1718.8	1694.3	1648.0	1490.2	1283.5	1135.8	1029.4	978.0	965.3	965.8	967.3
30°	1945.9	1897.0	1783.4	1493.8	1228.5	1035.0	935.8	899.1	893.0	895.5	904.2
32.5°	2156.1	2109.8	1921.9	1477.5	1144.0	936.3	851.8	827.3	818.2	821.2	825.3
35°	2321.1	2308.3	2050.2	1454.6	1040.1	843.6	776.4	755.5	737.7	733.6	736.7
37.5°	2476.9	2471.8	2146.4	1422.5	937.3	777.9	715.8	688.3	662.4	648.1	648.6
40°	2647.9	2642.8	2209.6	1373.1	846.2	720.9	661.3	625.2	593.1	567.2	569.7
42.5°	2840.4	2810.3	2239.6	1302.3	768.8	672.5	617.1	568.2	525.9	502.0	503.5
45°	3050.6	2982.9	2239.1	1212.2	703.6	628.3	569.7	500.5	461.3	438.9	437.8
47.5°	3273.6	3147.9	2211.6	1112.4	640.5	579.4	496.4	443.4	417.5	403.7	400.7
50°	3503.8	3302.1	2164.8	997.9	575.8	523.9	450.6	414.4	394.6	381.8	377.3
52.5°	3720.1	3442.1	2108.3	868.0	510.1	469.9	430.2	402.2	381.3	367.1	361.0
55°	3921.2	3562.8	2028.3	735.2	456.7	433.8	420.5	397.1	373.2	356.4	349.8
57.5°	4099.9	3641.2	1890.4	610.4	418.5	408.8	410.3	388.5	361.0	346.7	337.5
60°	4248.6	3698.7	1686.2	494.9	387.4	384.4	394.6	372.2	340.1	323.8	316.7
62.5°	4337.7	3697.7	1435.7	405.3	361.0	362.0	373.7	351.8	319.2	303.9	299.4
65°	4330.1	3607.1	1160.8	346.7	335.5	336.5	351.8	329.4	301.9	292.7	292.2
67.5°	4176.8	3386.1	890.4	308.5	307.5	312.1	329.9	314.1	291.2	290.2	291.7
70°	3761.9	2927.4	641.5	278.0	278.5	285.1	308.5	304.5	285.6	287.7	287.1
72.5°	3016.5	2232.0	430.7	245.9	246.4	257.1	288.2	296.8	280.0	307.0	311.1
75°	2009.0	1391.9	277.0	211.8	212.3	226.0	270.3	282.1	264.7	306.0	308.5
77.5°	965.3	625.7	200.6	178.2	178.2	190.9	233.7	252.5	225.5	237.8	217.9
80°	333.5	235.2	157.8	143.6	140.5	149.2	197.0	218.9	194.5	179.2	168.0
82.5°	131.4	122.2	126.8	111.5	101.3	106.9	153.2	180.7	143.1	129.3	128.8
85°	75.3	79.4	89.6	73.8	58.5	65.7	112.5	129.8	107.9	95.2	97.2
87.5°	20.4	28.0	41.2	38.2	26.5	28.0	53.5	71.8	62.1	47.9	49.4
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)