

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: P882459

Luminaire Tested: **NAV-SB2B-830-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882459  
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-830-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

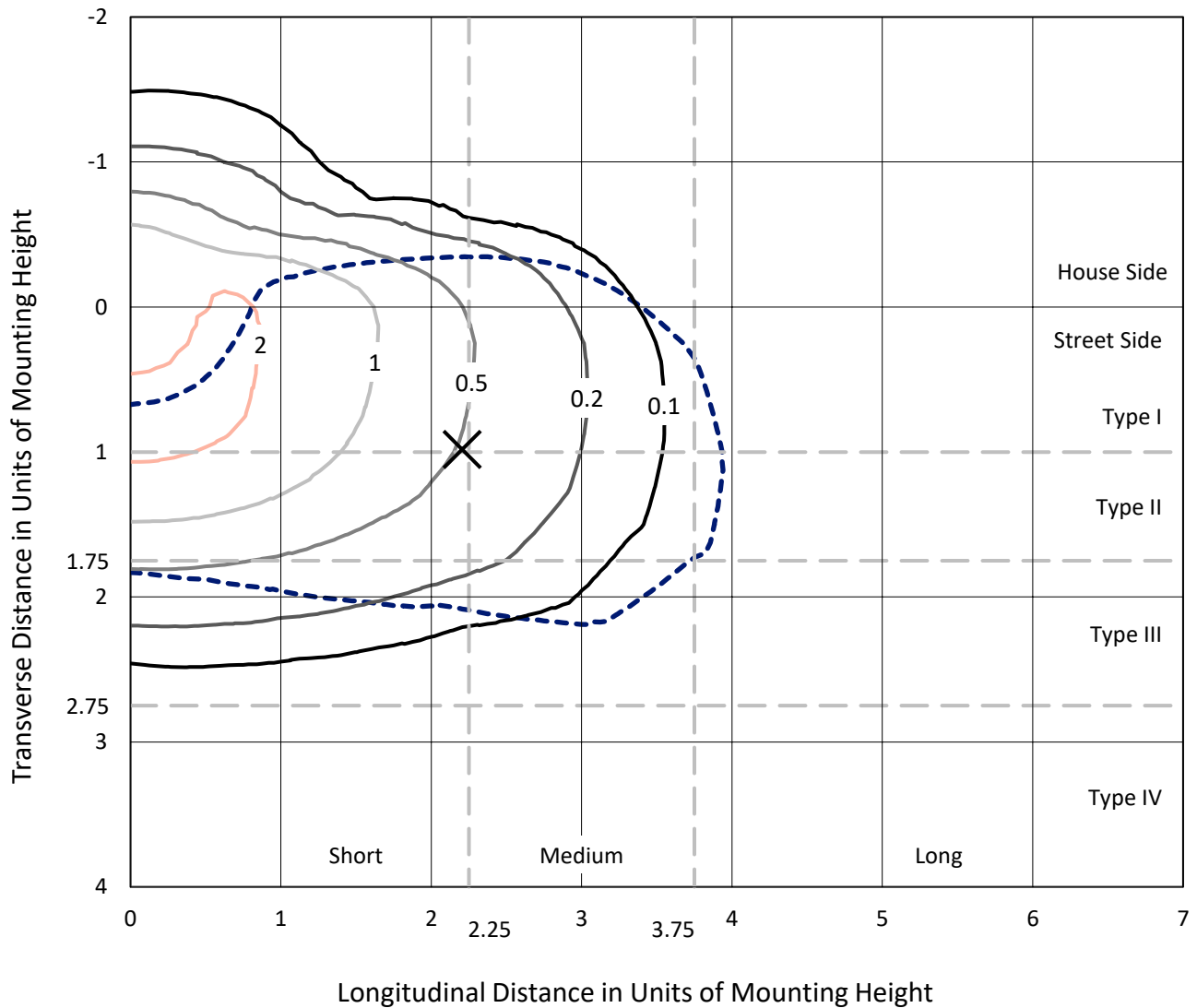
Lumens per Lamp: N/A  
Luminaire Lumens: 10049 lumens  
Efficiency: N/A  
Efficacy: 136.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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: P882459  
 CATALOG NUMBER: NAV-SB2B-830-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

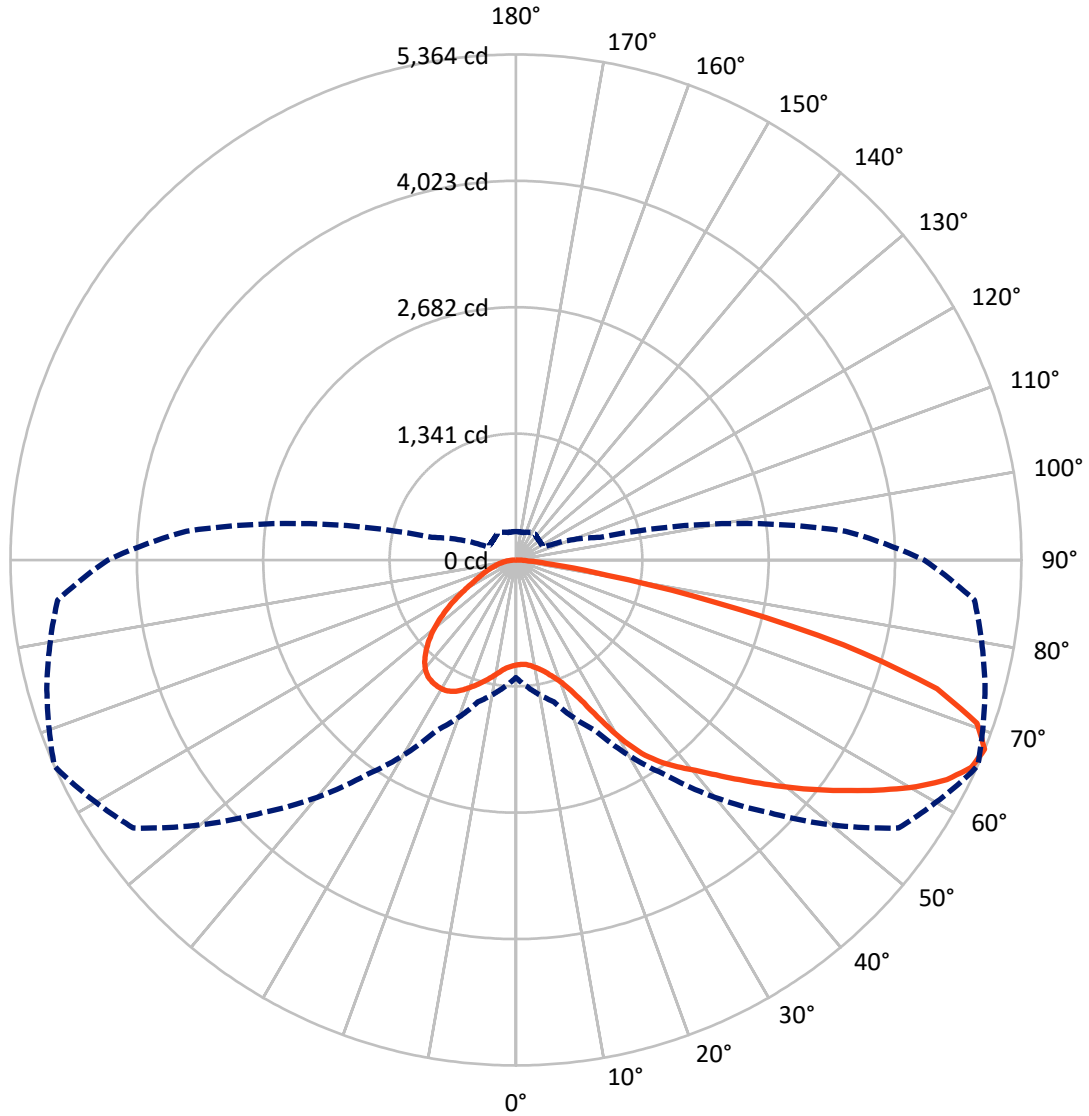
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Short - N/A

REPORT NUMBER: P882459  
CATALOG NUMBER: NAV-SB2B-830-U-T3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P882459  
 CATALOG NUMBER: NAV-SB2B-830-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2498.7	0.0	2498.7
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	7550.3	0.0	7550.3
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	10049.0	0.0	10049.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.5	1.1
10°-20°	365.1	3.6
20°-30°	703.7	7.0
30°-40°	1233.8	12.3
40°-50°	1834.3	18.3
50°-60°	2325.2	23.1
60°-70°	2275.1	22.6
70°-80°	1085.3	10.8
80°-90°	116.0	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°	10049.0	100.0
0°-180°	10049.0	100.0

**Coefficient of Utilization**



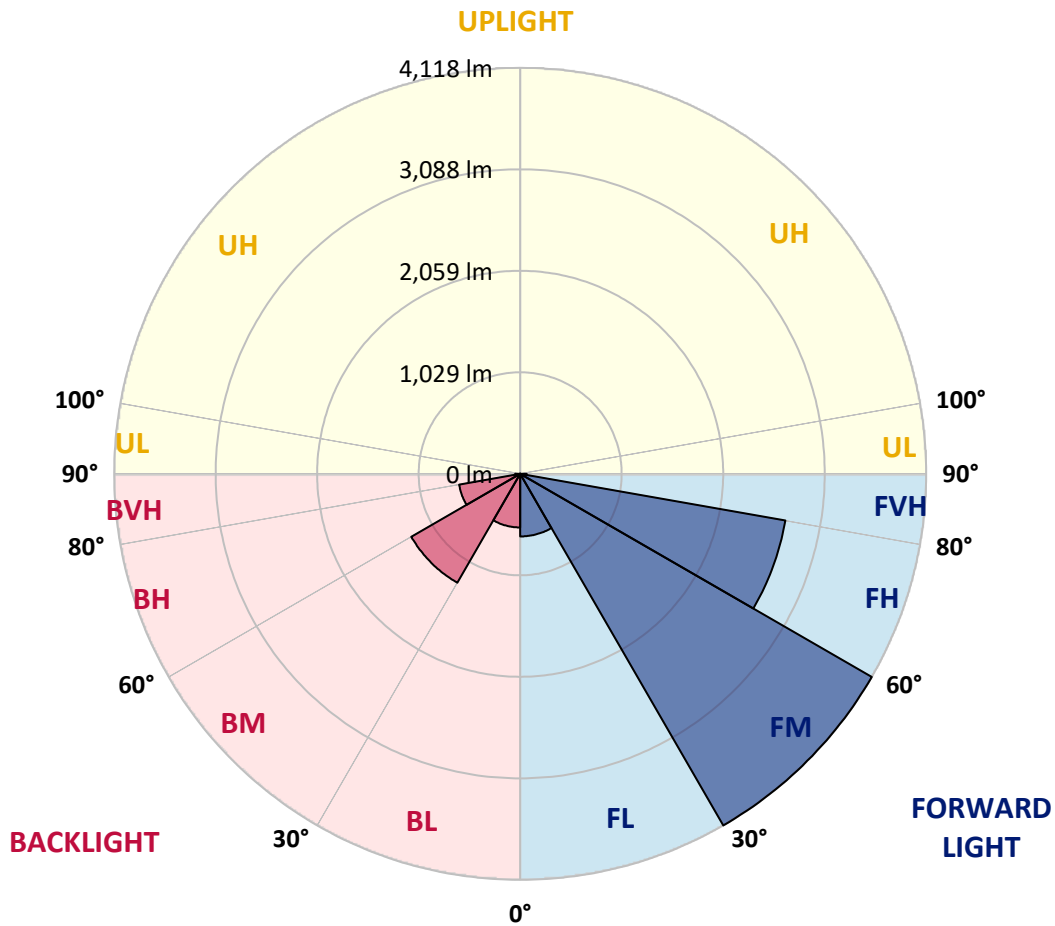
REPORT NUMBER: P882459  
 CATALOG NUMBER: NAV-SB2B-830-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	635.0	6.3			
FM (30°-60°)	4118.0	41.0			
FH (60°-80°)	2731.6	27.2			G2/5000
FVH (80°-90°)	65.8	0.7			G1/100
BL (0°-30°)	544.3	5.4	B2/1000		
BM (30°-60°)	1275.3	12.7	B2/2500		
BH (60°-80°)	628.8	6.3	B2/1000		G2/1000
BVH (80°-90°)	50.2	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: P882459

CATALOG NUMBER: NAV-SB2B-830-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6
2.5°	1103.0	1109.3	1107.7	1105.1	1104.5	1105.6	1107.2	1108.8	1108.2	1110.9	1115.1
5°	1099.8	1106.1	1105.6	1105.6	1107.7	1111.9	1114.6	1117.2	1114.6	1117.7	1123.5
7.5°	1101.9	1106.6	1108.8	1110.9	1116.2	1124.1	1130.4	1136.2	1133.0	1136.7	1144.1
10°	1128.8	1132.5	1134.6	1134.6	1138.3	1147.3	1153.6	1164.2	1161.6	1167.4	1176.9
12.5°	1177.9	1181.6	1181.6	1179.5	1182.1	1188.0	1190.1	1201.7	1196.9	1206.4	1215.9
15°	1238.1	1245.5	1239.7	1236.0	1237.1	1242.9	1242.3	1251.3	1246.6	1254.5	1262.9
17.5°	1304.6	1314.1	1304.6	1304.1	1302.0	1308.3	1308.9	1316.8	1308.3	1314.1	1320.0
20°	1383.3	1396.5	1388.6	1391.2	1386.5	1389.1	1391.8	1403.4	1390.2	1394.4	1392.8
22.5°	1494.2	1510.0	1501.6	1511.6	1508.4	1506.3	1505.8	1526.4	1505.8	1507.4	1492.1
25°	1655.7	1674.8	1660.0	1673.7	1673.7	1680.6	1688.5	1714.9	1680.6	1670.5	1630.9
27.5°	1894.4	1913.4	1884.4	1892.8	1890.2	1907.1	1898.6	1964.1	1927.1	1910.8	1831.0
30°	2181.6	2215.4	2160.5	2158.4	2155.7	2182.7	2194.8	2238.1	2200.6	2184.3	2088.2
32.5°	2492.1	2527.4	2462.0	2443.0	2432.9	2449.3	2439.3	2474.1	2448.2	2422.9	2304.1
35°	2820.5	2855.3	2793.0	2756.1	2715.9	2681.6	2645.7	2654.7	2630.4	2591.9	2468.8
37.5°	3130.9	3194.8	3128.8	3089.2	3015.3	2948.2	2847.9	2806.2	2783.5	2748.1	2624.1
40°	3447.2	3483.6	3433.5	3399.7	3319.4	3214.3	3053.8	2965.7	2935.0	2900.7	2795.7
42.5°	3680.0	3714.9	3687.9	3664.7	3601.9	3479.9	3272.4	3162.1	3117.7	3079.2	2990.0
45°	3864.8	3890.7	3873.8	3882.2	3855.3	3737.0	3498.9	3372.7	3326.8	3279.8	3209.6
47.5°	3939.3	3966.7	3993.6	4043.8	4089.7	4002.6	3742.3	3600.8	3552.3	3504.2	3435.0
50°	3930.8	3958.8	4036.9	4143.6	4286.1	4257.1	3998.9	3843.7	3798.8	3743.9	3680.0
52.5°	3863.2	3894.9	3995.2	4172.6	4399.7	4447.7	4260.3	4094.5	4052.3	3986.8	3922.9
55°	3685.8	3704.8	3855.3	4106.6	4426.6	4580.8	4516.3	4361.6	4319.4	4228.1	4158.4
57.5°	3356.9	3384.4	3603.5	3928.7	4359.0	4671.0	4741.3	4642.5	4601.9	4470.4	4397.5
60°	2927.7	2971.5	3222.3	3629.9	4186.9	4670.5	4945.6	4918.7	4884.9	4709.1	4633.0
62.5°	2441.9	2492.6	2733.9	3207.5	3885.9	4538.0	5073.4	5149.9	5132.5	4929.2	4832.1
65°	1875.4	1910.2	2150.5	2661.0	3417.6	4253.4	5088.1	5307.8	5311.0	5096.6	4936.1
67.5°	1248.7	1349.0	1557.5	1996.8	2790.4	3788.3	4958.3	5333.7	5364.3	5154.1	4883.8
70°	609.3	741.3	945.6	1297.8	1996.8	3075.0	4618.8	5121.4	5189.5	4986.2	4572.3
72.5°	252.9	295.7	407.1	640.4	1146.2	2075.0	3936.6	4545.9	4672.1	4418.1	3844.2
75°	170.5	184.8	232.8	328.4	522.2	1023.2	2839.0	3389.6	3592.9	3336.8	2727.5
77.5°	131.5	140.4	169.5	229.7	310.5	387.0	1519.5	2042.8	2147.8	1988.4	1419.2
80°	103.5	110.3	126.7	167.4	220.2	207.0	517.9	925.5	986.3	827.3	456.2
82.5°	89.8	92.4	90.8	113.5	146.3	120.9	170.0	341.6	377.0	273.5	148.9
85°	64.9	72.3	75.5	70.2	77.6	61.2	69.7	120.9	133.1	118.8	83.9
87.5°	26.4	39.1	48.0	45.4	28.5	17.4	21.6	35.4	40.7	44.4	27.5
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: P882459  
 CATALOG NUMBER: NAV-SB2B-830-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6	1114.6
2.5°	1115.6	1119.3	1122.0	1125.1	1127.2	1130.4	1136.7	1140.4	1141.0	1143.6	1143.1
5°	1125.7	1130.9	1136.7	1145.2	1154.7	1162.6	1174.8	1183.2	1186.4	1189.0	1188.5
7.5°	1147.3	1154.7	1165.3	1180.0	1193.8	1204.3	1219.1	1229.1	1239.2	1242.9	1243.4
10°	1179.5	1190.1	1205.4	1225.4	1240.2	1254.0	1269.3	1277.7	1287.7	1292.0	1294.1
12.5°	1219.6	1230.7	1250.8	1278.8	1292.5	1302.0	1307.3	1305.2	1307.3	1311.0	1312.0
15°	1265.6	1277.7	1300.4	1330.5	1340.0	1331.6	1320.0	1309.4	1307.8	1308.9	1312.6
17.5°	1320.0	1328.9	1355.3	1380.7	1373.8	1339.0	1313.6	1296.7	1288.3	1285.6	1289.3
20°	1396.0	1396.0	1417.6	1433.5	1387.5	1328.4	1288.8	1261.3	1243.9	1236.5	1234.9
22.5°	1488.4	1479.9	1493.7	1482.6	1384.9	1298.8	1243.9	1196.4	1170.0	1159.4	1157.9
25°	1605.6	1595.6	1591.9	1523.2	1365.9	1251.8	1162.6	1105.1	1081.8	1076.0	1077.1
27.5°	1782.5	1757.1	1709.1	1545.4	1331.0	1177.9	1067.6	1014.3	1001.1	1001.6	1003.2
30°	2017.9	1967.3	1849.5	1549.1	1274.0	1073.4	970.4	932.4	926.1	928.7	937.7
32.5°	2236.0	2188.0	1993.1	1532.2	1186.4	971.0	883.3	858.0	848.5	851.6	855.9
35°	2407.1	2393.9	2126.2	1508.4	1078.7	874.9	805.2	783.5	765.0	760.8	764.0
37.5°	2568.6	2563.3	2226.0	1475.2	972.0	806.8	742.3	713.8	686.9	672.1	672.6
40°	2746.0	2740.7	2291.4	1424.0	877.5	747.6	685.8	648.4	615.1	588.2	590.8
42.5°	2945.6	2914.5	2322.6	1350.6	797.3	697.5	639.9	589.2	545.4	520.6	522.2
45°	3163.7	3093.4	2322.1	1257.1	729.7	651.5	590.8	519.0	478.4	455.1	454.1
47.5°	3394.9	3264.5	2293.5	1153.6	664.2	600.8	514.8	459.9	432.9	418.7	415.5
50°	3633.6	3424.5	2245.0	1034.8	597.1	543.3	467.3	429.8	409.2	396.0	391.2
52.5°	3858.0	3569.7	2186.4	900.2	529.0	487.3	446.1	417.1	395.5	380.7	374.3
55°	4066.5	3694.8	2103.5	762.4	473.6	449.8	436.1	411.8	387.0	369.6	362.7
57.5°	4251.8	3776.1	1960.4	633.0	434.0	424.0	425.6	402.8	374.3	359.6	350.1
60°	4406.0	3835.8	1748.7	513.2	401.8	398.6	409.2	386.0	352.7	335.8	328.4
62.5°	4498.4	3834.7	1488.9	420.3	374.3	375.4	387.5	364.8	331.0	315.2	310.5
65°	4490.5	3740.7	1203.8	359.6	347.9	349.0	364.8	341.6	313.1	303.6	303.1
67.5°	4331.6	3511.6	923.4	320.0	318.9	323.7	342.1	325.8	302.0	300.9	302.5
70°	3901.2	3035.9	665.3	288.3	288.8	295.7	320.0	315.7	296.2	298.3	297.8
72.5°	3128.3	2314.7	446.7	255.0	255.5	266.6	298.8	307.8	290.4	318.4	322.6
75°	2083.4	1443.5	287.2	219.6	220.2	234.4	280.4	292.5	274.5	317.3	320.0
77.5°	1001.1	648.9	208.0	184.8	184.8	198.0	242.3	261.9	233.9	246.6	226.0
80°	345.8	243.9	163.7	148.9	145.7	154.7	204.3	227.0	201.7	185.8	174.2
82.5°	136.2	126.7	131.5	115.6	105.1	110.9	158.9	187.4	148.4	134.1	133.6
85°	78.1	82.4	92.9	76.6	60.7	68.1	116.7	134.6	111.9	98.7	100.8
87.5°	21.1	29.0	42.8	39.6	27.5	29.0	55.4	74.4	64.4	49.6	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)