

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: P882069

Luminaire Tested: **NAV-SB1D-735-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882069  
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-SB1D-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

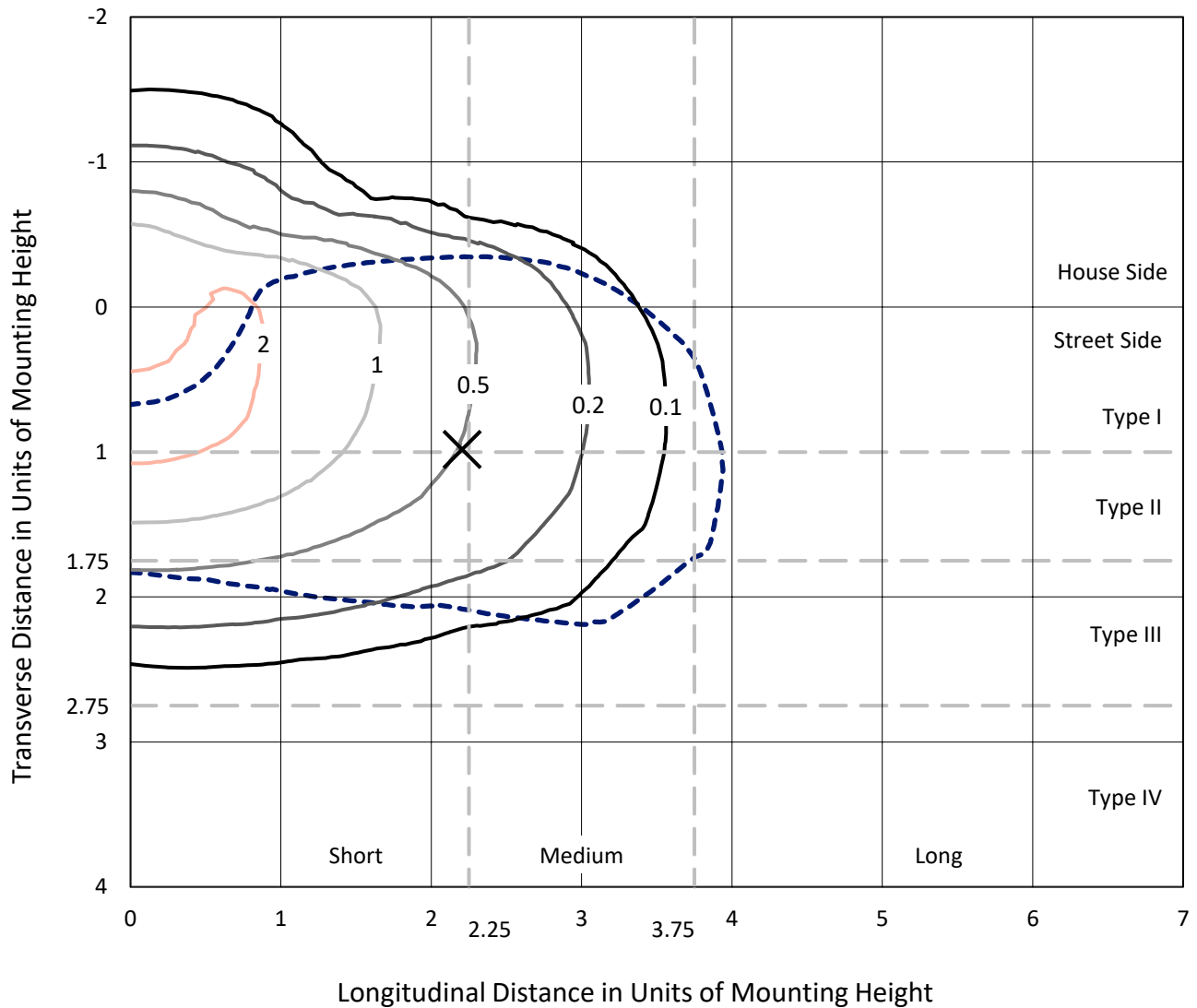
Lumens per Lamp: N/A  
Luminaire Lumens: 10192 lumens  
Efficiency: N/A  
Efficacy: 128.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): 120.0  
Input Current (Ain): 0.638  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.673  
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

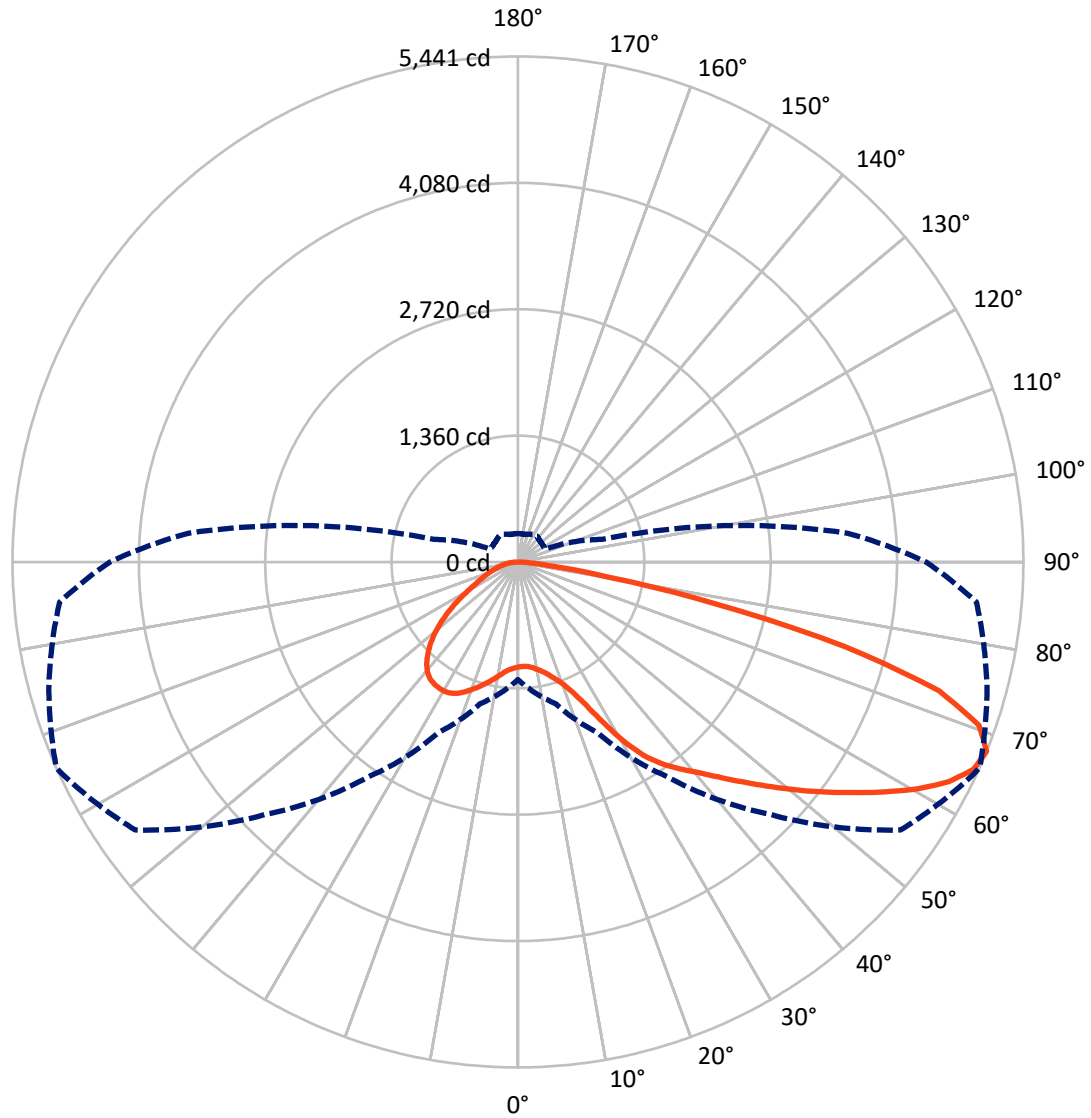
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2534.2	0.0	2534.2
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	7657.8	0.0	7657.8
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	10192.0	0.0	10192.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.1	1.1
10°-20°	370.3	3.6
20°-30°	713.7	7.0
30°-40°	1251.4	12.3
40°-50°	1860.4	18.3
50°-60°	2358.3	23.1
60°-70°	2307.5	22.6
70°-80°	1100.7	10.8
80°-90°	117.6	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°	10192.0	100.0
0°-180°	10192.0	100.0

**Coefficient of Utilization**



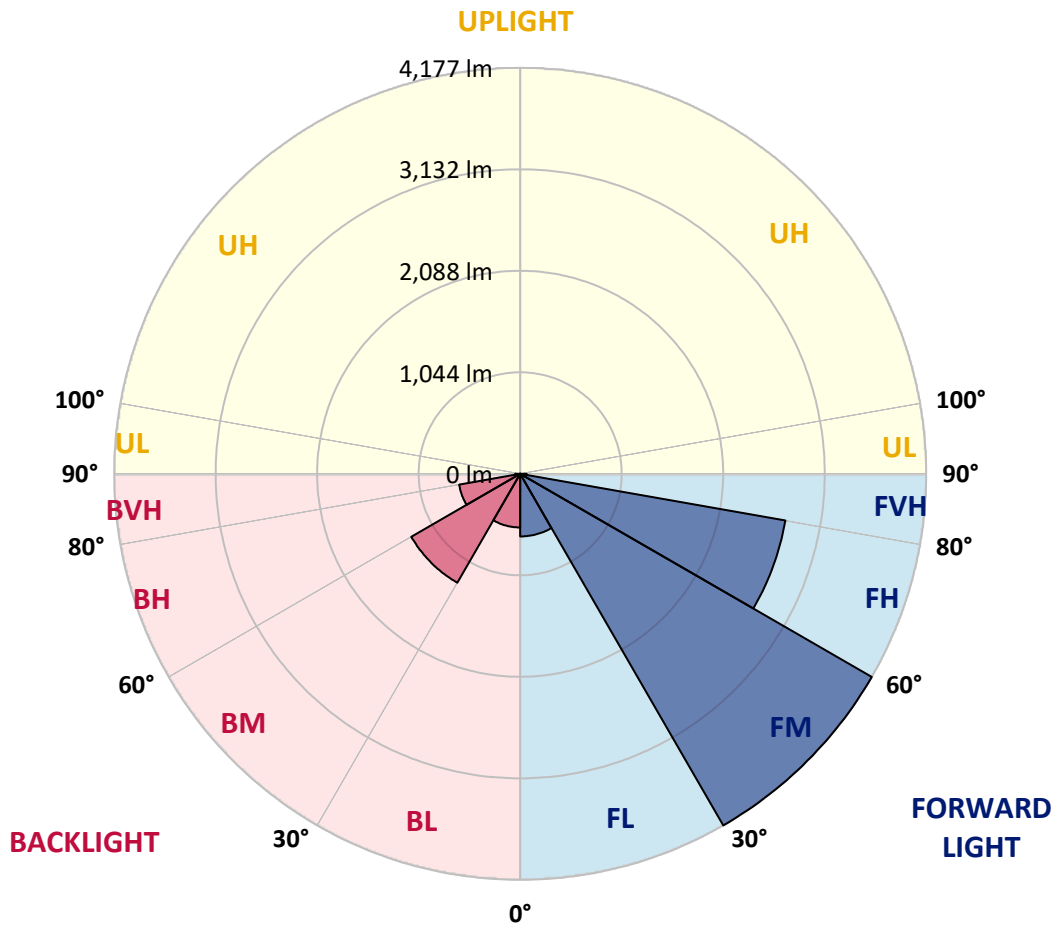
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	644.0	6.3			
FM (30°-60°)	4176.6	41.0			
FH (60°-80°)	2770.5	27.2			G2/5000
FVH (80°-90°)	66.7	0.7			G1/100
BL (0°-30°)	552.0	5.4	B2/1000		
BM (30°-60°)	1293.5	12.7	B2/2500		
BH (60°-80°)	637.7	6.3	B2/1000		G2/1000
BVH (80°-90°)	50.9	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4
2.5°	1118.6	1125.1	1123.5	1120.8	1120.3	1121.3	1122.9	1124.5	1124.0	1126.7	1131.0
5°	1115.4	1121.9	1121.3	1121.3	1123.5	1127.8	1130.4	1133.1	1130.4	1133.6	1139.5
7.5°	1117.6	1122.4	1124.5	1126.7	1132.0	1140.1	1146.5	1152.4	1149.2	1152.9	1160.4
10°	1144.9	1148.6	1150.8	1150.8	1154.5	1163.6	1170.1	1180.8	1178.1	1184.0	1193.6
12.5°	1194.7	1198.4	1198.4	1196.3	1199.0	1204.9	1207.0	1218.8	1214.0	1223.6	1233.2
15°	1255.7	1263.2	1257.3	1253.6	1254.7	1260.6	1260.0	1269.1	1264.3	1272.3	1280.9
17.5°	1323.2	1332.8	1323.2	1322.7	1320.5	1327.0	1327.5	1335.5	1327.0	1332.8	1338.7
20°	1403.0	1416.4	1408.3	1411.0	1406.2	1408.9	1411.6	1423.3	1410.0	1414.2	1412.6
22.5°	1515.4	1531.5	1522.9	1533.1	1529.9	1527.8	1527.2	1548.1	1527.2	1528.8	1513.3
25°	1679.3	1698.6	1683.6	1697.5	1697.5	1704.5	1712.5	1739.3	1704.5	1694.3	1654.1
27.5°	1921.4	1940.6	1911.2	1919.7	1917.1	1934.2	1925.6	1992.0	1954.6	1938.0	1857.1
30°	2212.7	2246.9	2191.2	2189.1	2186.4	2213.7	2226.0	2270.0	2231.9	2215.3	2117.9
32.5°	2527.5	2563.4	2497.0	2477.7	2467.6	2484.2	2474.0	2509.3	2483.1	2457.4	2336.9
35°	2860.6	2896.0	2832.8	2795.3	2754.6	2719.8	2683.4	2692.5	2667.8	2628.7	2504.0
37.5°	3175.5	3240.3	3173.3	3133.2	3058.2	2990.2	2888.5	2846.1	2823.1	2787.2	2661.4
40°	3496.2	3533.2	3482.3	3448.0	3366.6	3260.1	3097.3	3007.9	2976.8	2942.0	2835.4
42.5°	3732.4	3767.7	3740.4	3716.9	3653.1	3529.4	3319.0	3207.1	3162.1	3123.0	3032.5
45°	3919.8	3946.1	3928.9	3937.5	3910.2	3790.2	3548.7	3420.7	3374.1	3326.5	3255.3
47.5°	3995.3	4023.2	4050.5	4101.3	4147.9	4059.6	3795.6	3652.1	3602.8	3554.1	3483.9
50°	3986.8	4015.1	4094.4	4202.6	4347.1	4317.7	4055.8	3898.4	3852.9	3797.2	3732.4
52.5°	3918.2	3950.3	4052.1	4232.0	4462.3	4511.0	4320.9	4152.8	4109.9	4043.5	3978.7
55°	3738.3	3757.6	3910.2	4165.1	4489.6	4645.9	4580.6	4423.7	4380.9	4288.2	4217.5
57.5°	3404.7	3432.5	3654.7	3984.6	4421.0	4737.5	4808.7	4708.6	4667.4	4534.0	4460.1
60°	2969.3	3013.8	3268.1	3681.5	4246.5	4737.0	5016.0	4988.7	4954.4	4776.1	4699.0
62.5°	2476.7	2528.1	2772.8	3253.1	3941.2	4602.6	5145.6	5223.2	5205.5	4999.4	4900.8
65°	1902.1	1937.4	2181.1	2698.9	3466.3	4313.9	5160.6	5383.3	5386.5	5169.1	5006.3
67.5°	1266.4	1368.2	1579.7	2025.2	2830.1	3842.2	5028.8	5409.6	5440.6	5227.5	4953.3
70°	618.0	751.8	959.1	1316.2	2025.2	3118.7	4684.5	5194.3	5263.4	5057.2	4637.4
72.5°	256.5	299.9	412.9	649.6	1162.6	2104.5	3992.6	4610.6	4738.6	4481.0	3898.9
75°	173.0	187.4	236.2	333.1	529.6	1037.8	2879.4	3437.9	3644.0	3384.3	2766.4
77.5°	133.3	142.4	171.9	232.9	314.9	392.5	1541.2	2071.8	2178.4	2016.7	1439.4
80°	105.0	111.9	128.5	169.8	223.3	209.9	525.3	938.7	1000.3	839.1	462.7
82.5°	91.0	93.7	92.1	115.1	148.3	122.6	172.4	346.5	382.3	277.4	151.0
85°	65.9	73.4	76.6	71.2	78.7	62.1	70.7	122.6	134.9	120.5	85.1
87.5°	26.8	39.6	48.7	46.1	28.9	17.7	22.0	35.9	41.2	45.0	27.8
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°	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4	1130.4
2.5°	1131.5	1135.2	1137.9	1141.1	1143.3	1146.5	1152.9	1156.7	1157.2	1159.9	1159.3
5°	1141.7	1147.0	1152.9	1161.5	1171.1	1179.2	1191.5	1200.0	1203.3	1205.9	1205.4
7.5°	1163.6	1171.1	1181.8	1196.8	1210.8	1221.5	1236.5	1246.6	1256.8	1260.6	1261.1
10°	1196.3	1207.0	1222.5	1242.9	1257.9	1271.8	1287.3	1295.9	1306.1	1310.4	1312.5
12.5°	1237.0	1248.2	1268.6	1297.0	1310.9	1320.5	1325.9	1323.7	1325.9	1329.6	1330.7
15°	1283.6	1295.9	1318.9	1349.4	1359.1	1350.5	1338.7	1328.0	1326.4	1327.5	1331.2
17.5°	1338.7	1347.8	1374.6	1400.3	1393.4	1358.0	1332.3	1315.2	1306.6	1303.9	1307.7
20°	1415.8	1415.8	1437.8	1453.9	1407.3	1347.3	1307.1	1279.3	1261.6	1254.1	1252.5
22.5°	1509.6	1501.0	1514.9	1503.7	1404.6	1317.3	1261.6	1213.4	1186.7	1175.9	1174.3
25°	1628.4	1618.3	1614.5	1544.9	1385.3	1269.7	1179.2	1120.8	1097.2	1091.3	1092.4
27.5°	1807.8	1782.1	1733.4	1567.4	1350.0	1194.7	1082.8	1028.7	1015.3	1015.8	1017.4
30°	2046.7	1995.3	1875.8	1571.1	1292.1	1088.7	984.2	945.7	939.3	941.9	951.0
32.5°	2267.8	2219.1	2021.5	1554.0	1203.3	984.8	895.9	870.2	860.5	863.8	868.0
35°	2441.3	2427.9	2156.4	1529.9	1094.0	887.3	816.6	794.7	775.9	771.6	774.9
37.5°	2605.2	2599.8	2257.6	1496.2	985.8	818.2	752.9	724.0	696.7	681.7	682.2
40°	2785.1	2779.7	2324.0	1444.2	890.0	758.3	695.6	657.6	623.9	596.5	599.2
42.5°	2987.5	2955.9	2355.6	1369.8	808.6	707.4	649.0	597.6	553.2	528.0	529.6
45°	3208.7	3137.5	2355.1	1275.0	740.1	660.8	599.2	526.4	485.2	461.6	460.5
47.5°	3443.2	3311.0	2326.2	1170.1	673.7	609.4	522.1	466.4	439.1	424.6	421.4
50°	3685.3	3473.2	2276.9	1049.6	605.6	551.0	473.9	435.9	415.0	401.6	396.8
52.5°	3912.9	3620.5	2217.5	913.0	536.6	494.3	452.5	423.0	401.1	386.1	379.7
55°	4124.4	3747.4	2133.4	773.3	480.3	456.2	442.3	417.7	392.5	374.8	367.9
57.5°	4312.3	3829.9	1988.3	642.1	440.2	430.0	431.6	408.6	379.7	364.7	355.0
60°	4468.7	3890.4	1773.6	520.5	407.5	404.3	415.0	391.4	357.7	340.6	333.1
62.5°	4562.4	3889.3	1510.1	426.3	379.7	380.7	393.1	370.0	335.8	319.7	314.9
65°	4554.4	3794.0	1220.9	364.7	352.9	354.0	370.0	346.5	317.5	307.9	307.4
67.5°	4393.2	3561.6	936.6	324.5	323.4	328.3	347.0	330.4	306.3	305.2	306.8
70°	3956.8	3079.1	674.7	292.4	292.9	299.9	324.5	320.2	300.4	302.6	302.0
72.5°	3172.8	2347.6	453.0	258.6	259.2	270.4	303.1	312.2	294.5	322.9	327.2
75°	2113.1	1464.0	291.3	222.8	223.3	237.8	284.3	296.7	278.5	321.8	324.5
77.5°	1015.3	658.1	211.0	187.4	187.4	200.8	245.8	265.6	237.2	250.1	229.2
80°	350.7	247.4	166.0	151.0	147.8	156.9	207.2	230.3	204.6	188.5	176.7
82.5°	138.2	128.5	133.3	117.3	106.6	112.5	161.2	190.1	150.5	136.0	135.5
85°	79.3	83.5	94.2	77.6	61.6	69.1	118.3	136.6	113.5	100.1	102.3
87.5°	21.4	29.5	43.4	40.2	27.8	29.5	56.2	75.5	65.3	50.3	51.9
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)