

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: P882049

Luminaire Tested: **NAV-SB1D-727-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882049  
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-727-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

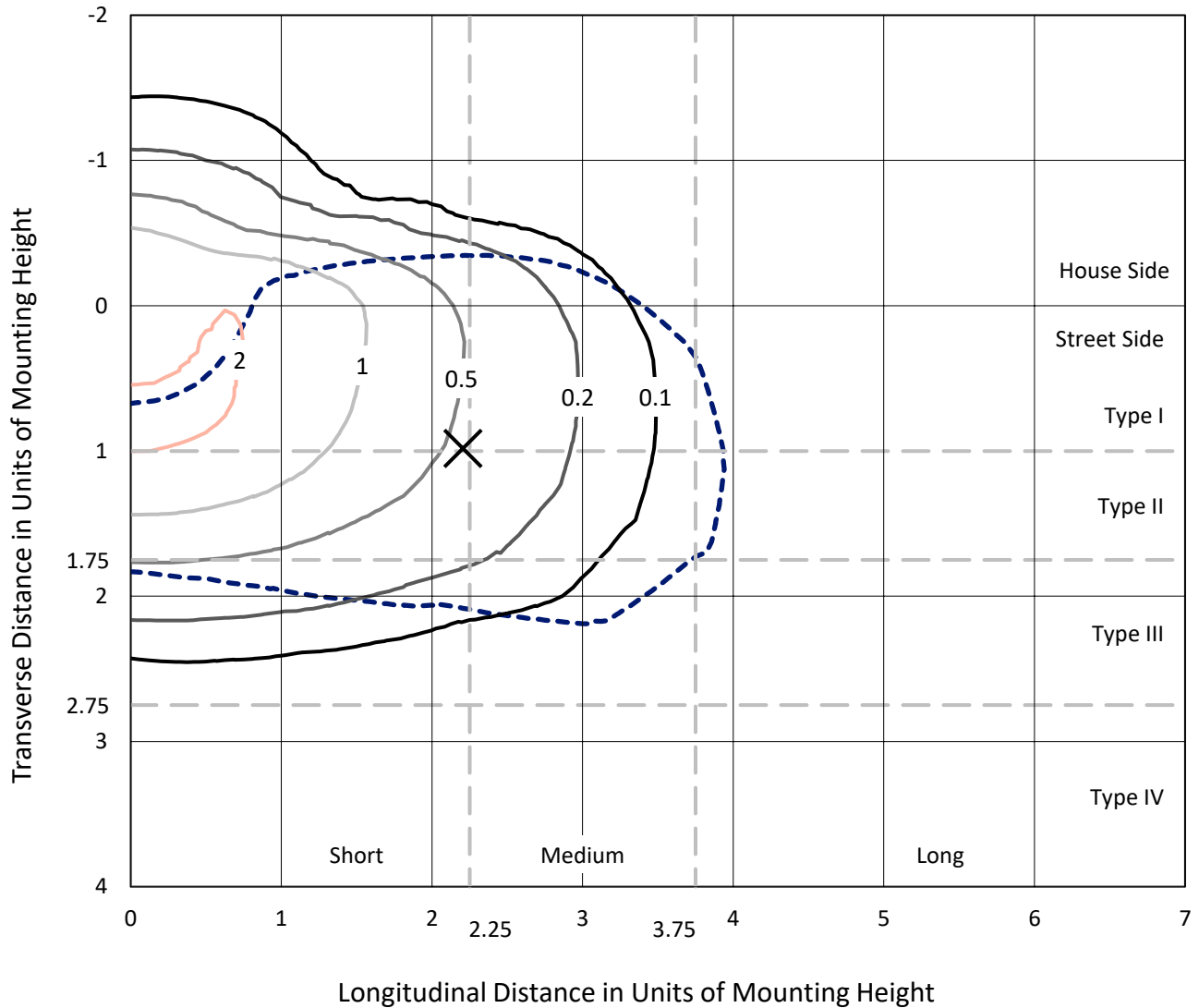
Lumens per Lamp: N/A  
Luminaire Lumens: 9236 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 79.6  
Input Voltage (V): 120.0  
Input Current (Ain): 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

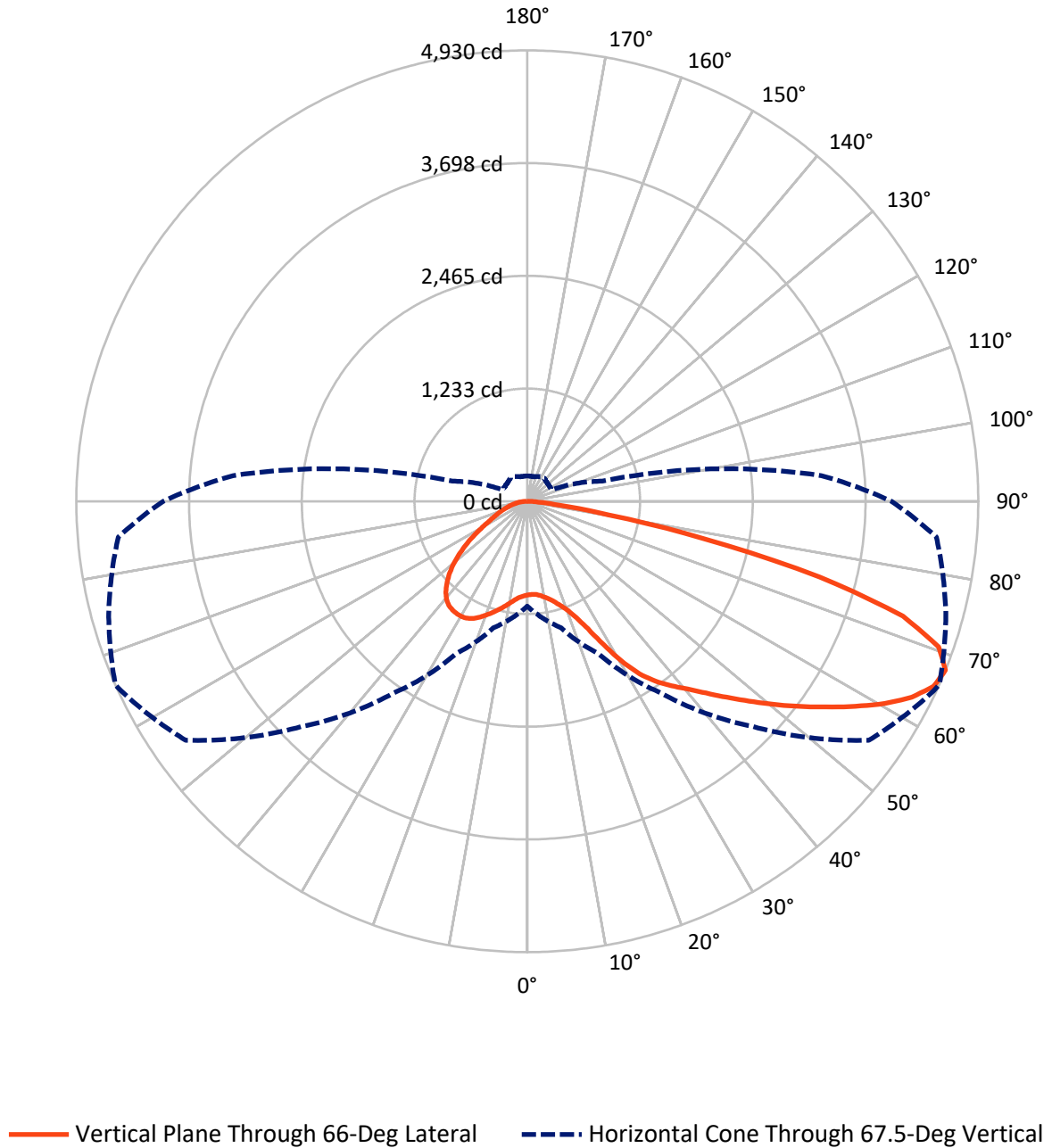
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2296.5	0.0	2296.5
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	6939.5	0.0	6939.5
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	9236.0	0.0	9236.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.6	1.1
10°-20°	335.6	3.6
20°-30°	646.8	7.0
30°-40°	1134.0	12.3
40°-50°	1685.9	18.3
50°-60°	2137.1	23.1
60°-70°	2091.1	22.6
70°-80°	997.5	10.8
80°-90°	106.6	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°	9236.0	100.0
0°-180°	9236.0	100.0

**Coefficient of Utilization**



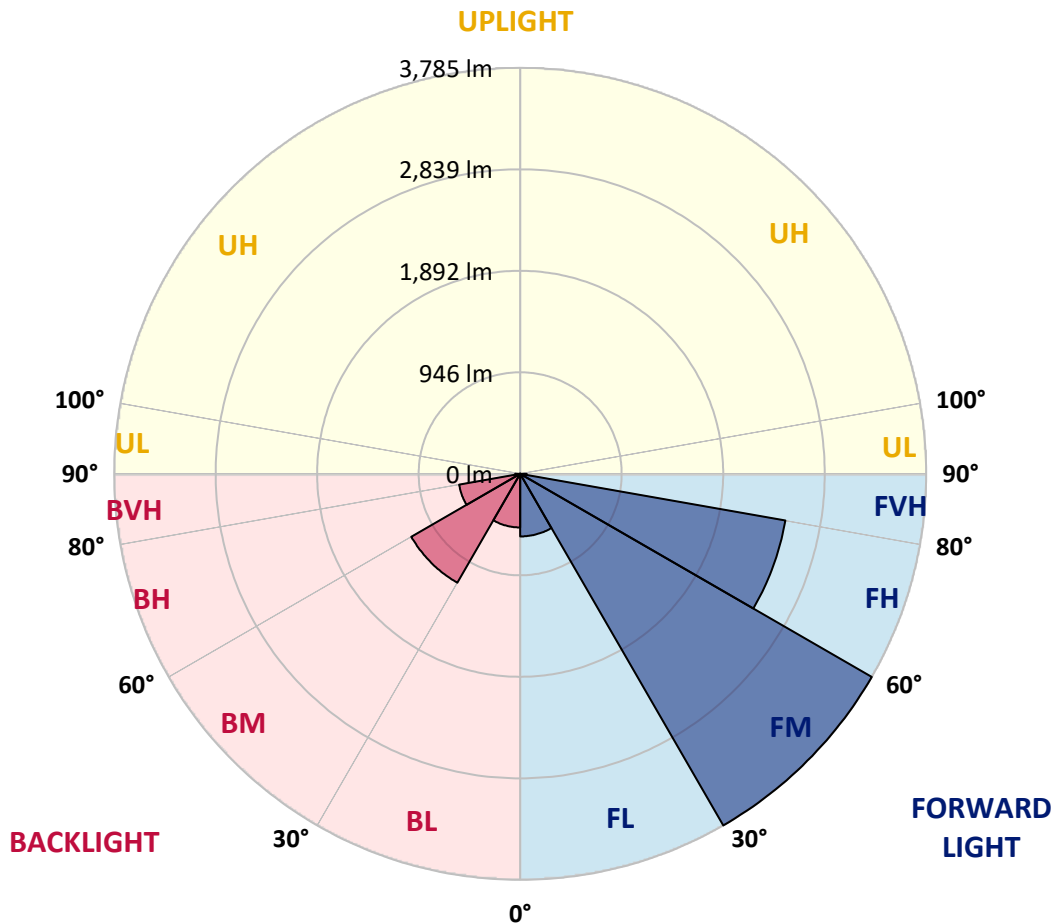
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	583.6	6.3			
FM (30°-60°)	3784.8	41.0			
FH (60°-80°)	2510.6	27.2			G2/5000
FVH (80°-90°)	60.4	0.7			G1/100
BL (0°-30°)	500.3	5.4	B2/1000		
BM (30°-60°)	1172.2	12.7	B2/2500		
BH (60°-80°)	577.9	6.3	B2/1000		G2/1000
BVH (80°-90°)	46.2	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4
2.5°	1013.7	1019.5	1018.1	1015.7	1015.2	1016.1	1017.6	1019.1	1018.6	1021.0	1024.9
5°	1010.8	1016.6	1016.1	1016.1	1018.1	1022.0	1024.4	1026.8	1024.4	1027.3	1032.6
7.5°	1012.7	1017.1	1019.1	1021.0	1025.9	1033.1	1039.0	1044.3	1041.4	1044.8	1051.6
10°	1037.5	1040.9	1042.8	1042.8	1046.2	1054.5	1060.3	1070.0	1067.6	1072.9	1081.7
12.5°	1082.6	1086.0	1086.0	1084.1	1086.5	1091.8	1093.8	1104.5	1100.1	1108.8	1117.6
15°	1137.9	1144.7	1139.4	1136.0	1137.0	1142.3	1141.8	1150.1	1145.7	1153.0	1160.8
17.5°	1199.1	1207.8	1199.1	1198.6	1196.7	1202.5	1203.0	1210.3	1202.5	1207.8	1213.2
20°	1271.4	1283.5	1276.2	1278.7	1274.3	1276.7	1279.2	1289.8	1277.7	1281.6	1280.1
22.5°	1373.3	1387.9	1380.1	1389.3	1386.4	1384.5	1384.0	1402.9	1384.0	1385.4	1371.4
25°	1521.8	1539.3	1525.7	1538.3	1538.3	1544.6	1551.9	1576.1	1544.6	1535.4	1499.0
27.5°	1741.1	1758.6	1731.9	1739.7	1737.2	1752.8	1745.0	1805.2	1771.2	1756.2	1682.9
30°	2005.1	2036.2	1985.7	1983.8	1981.3	2006.1	2017.2	2057.0	2022.6	2007.5	1919.2
32.5°	2290.5	2323.0	2262.8	2245.3	2236.1	2251.1	2241.9	2274.0	2250.2	2226.9	2117.7
35°	2592.3	2624.3	2567.1	2533.1	2496.2	2464.7	2431.7	2439.9	2417.6	2382.2	2269.1
37.5°	2877.6	2936.3	2875.7	2839.3	2771.3	2709.7	2617.5	2579.2	2558.3	2525.8	2411.8
40°	3168.3	3201.8	3155.7	3124.6	3050.9	2954.3	2806.8	2725.7	2697.6	2666.0	2569.5
42.5°	3382.3	3414.3	3389.6	3368.2	3310.5	3198.4	3007.7	2906.3	2865.5	2830.1	2748.1
45°	3552.1	3575.9	3560.4	3568.2	3543.4	3434.7	3215.9	3099.9	3057.7	3014.5	2949.9
47.5°	3620.6	3645.8	3670.5	3716.6	3758.9	3678.8	3439.6	3309.5	3264.9	3220.7	3157.1
50°	3612.8	3638.5	3710.3	3808.4	3939.4	3912.7	3675.4	3532.7	3491.5	3441.0	3382.3
52.5°	3550.7	3579.8	3672.0	3835.0	4043.7	4087.9	3915.6	3763.2	3724.4	3664.2	3605.5
55°	3387.6	3405.1	3543.4	3774.4	4068.5	4210.2	4151.0	4008.8	3970.0	3886.0	3821.9
57.5°	3085.3	3110.5	3311.9	3610.9	4006.3	4293.1	4357.7	4266.9	4229.6	4108.7	4041.8
60°	2690.8	2731.1	2961.6	3336.2	3848.2	4292.7	4545.5	4520.7	4489.7	4328.1	4258.2
62.5°	2244.4	2290.9	2512.7	2948.0	3571.6	4170.9	4662.9	4733.3	4717.3	4530.4	4441.1
65°	1723.7	1755.7	1976.5	2445.7	3141.1	3909.3	4676.5	4878.4	4881.3	4684.3	4536.7
67.5°	1147.7	1239.9	1431.5	1835.3	2564.6	3481.8	4557.1	4902.1	4930.3	4737.2	4488.7
70°	560.0	681.3	869.1	1192.8	1835.3	2826.2	4245.1	4707.1	4769.7	4582.8	4202.4
72.5°	232.4	271.7	374.1	588.6	1053.5	1907.1	3618.1	4178.1	4294.1	4060.7	3533.2
75°	156.7	169.8	214.0	301.8	479.9	940.4	2609.3	3115.4	3302.2	3066.9	2506.9
77.5°	120.8	129.1	155.8	211.1	285.3	355.7	1396.6	1877.5	1974.1	1827.5	1304.4
80°	95.1	101.4	116.5	153.8	202.4	190.2	476.0	850.7	906.5	760.4	419.3
82.5°	82.5	84.9	83.5	104.3	134.4	111.1	156.3	314.0	346.5	251.4	136.8
85°	59.7	66.5	69.4	64.5	71.3	56.3	64.1	111.1	122.3	109.2	77.2
87.5°	24.3	35.9	44.2	41.7	26.2	16.0	19.9	32.5	37.4	40.8	25.2
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°	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4	1024.4
2.5°	1025.4	1028.8	1031.2	1034.1	1036.0	1039.0	1044.8	1048.2	1048.7	1051.1	1050.6
5°	1034.6	1039.4	1044.8	1052.5	1061.3	1068.6	1079.7	1087.5	1090.4	1092.8	1092.3
7.5°	1054.5	1061.3	1071.0	1084.6	1097.2	1106.9	1120.5	1129.7	1138.9	1142.3	1142.8
10°	1084.1	1093.8	1107.9	1126.3	1139.9	1152.5	1166.6	1174.3	1183.6	1187.4	1189.4
12.5°	1121.0	1131.2	1149.6	1175.3	1187.9	1196.7	1201.5	1199.6	1201.5	1204.9	1205.9
15°	1163.2	1174.3	1195.2	1222.9	1231.6	1223.8	1213.2	1203.5	1202.0	1203.0	1206.4
17.5°	1213.2	1221.4	1245.7	1269.0	1262.7	1230.6	1207.3	1191.8	1184.0	1181.6	1185.0
20°	1283.0	1283.0	1302.9	1317.5	1275.3	1220.9	1184.5	1159.3	1143.3	1136.5	1135.0
22.5°	1368.0	1360.2	1372.8	1362.6	1272.9	1193.8	1143.3	1099.6	1075.3	1065.6	1064.2
25°	1475.7	1466.5	1463.1	1400.0	1255.4	1150.6	1068.6	1015.7	994.3	989.0	989.9
27.5°	1638.3	1615.0	1570.8	1420.4	1223.4	1082.6	981.2	932.2	920.1	920.5	922.0
30°	1854.7	1808.1	1699.9	1423.8	1170.9	986.5	891.9	857.0	851.2	853.6	861.8
32.5°	2055.1	2010.9	1831.9	1408.2	1090.4	892.4	811.8	788.6	779.8	782.7	786.6
35°	2212.3	2200.2	1954.2	1386.4	991.4	804.1	740.0	720.1	703.1	699.3	702.2
37.5°	2360.8	2356.0	2045.9	1355.8	893.4	741.5	682.3	656.1	631.3	617.7	618.2
40°	2523.9	2519.0	2106.1	1308.8	806.5	687.1	630.4	595.9	565.3	540.6	543.0
42.5°	2707.3	2678.7	2134.7	1241.3	732.8	641.0	588.1	541.6	501.3	478.5	479.9
45°	2907.7	2843.2	2134.2	1155.4	670.6	598.8	543.0	477.0	439.7	418.3	417.3
47.5°	3120.3	3000.4	2108.0	1060.3	610.5	552.2	473.1	422.7	397.9	384.8	381.9
50°	3339.6	3147.4	2063.3	951.1	548.8	499.3	429.5	395.0	376.1	363.9	359.6
52.5°	3545.8	3280.9	2009.5	827.4	486.2	447.9	410.0	383.4	363.5	349.9	344.1
55°	3737.5	3395.9	1933.3	700.7	435.3	413.4	400.8	378.5	355.7	339.7	333.4
57.5°	3907.8	3470.6	1801.8	581.8	398.9	389.7	391.1	370.3	344.1	330.5	321.7
60°	4049.5	3525.5	1607.2	471.7	369.3	366.4	376.1	354.7	324.2	308.6	301.8
62.5°	4134.5	3524.5	1368.4	386.3	344.1	345.0	356.2	335.3	304.3	289.7	285.3
65°	4127.2	3438.1	1106.4	330.5	319.8	320.8	335.3	314.0	287.8	279.0	278.5
67.5°	3981.1	3227.5	848.7	294.1	293.1	297.5	314.5	299.4	277.6	276.6	278.1
70°	3585.6	2790.3	611.4	265.0	265.4	271.7	294.1	290.2	272.2	274.2	273.7
72.5°	2875.2	2127.4	410.5	234.4	234.9	245.1	274.7	282.9	266.9	292.6	296.5
75°	1914.9	1326.7	264.0	201.9	202.4	215.5	257.7	268.8	252.3	291.6	294.1
77.5°	920.1	596.4	191.2	169.8	169.8	182.0	222.7	240.7	215.0	226.6	207.7
80°	317.8	224.2	150.4	136.8	133.9	142.2	187.8	208.7	185.4	170.8	160.1
82.5°	125.2	116.5	120.8	106.3	96.6	101.9	146.1	172.3	136.4	123.3	122.8
85°	71.8	75.7	85.4	70.4	55.8	62.6	107.2	123.7	102.9	90.7	92.7
87.5°	19.4	26.7	39.3	36.4	25.2	26.7	51.0	68.4	59.2	45.6	47.1
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)