

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: P960825

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
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: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9684.2 lumens
Efficiency: N/A
Efficacy: 121.7 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

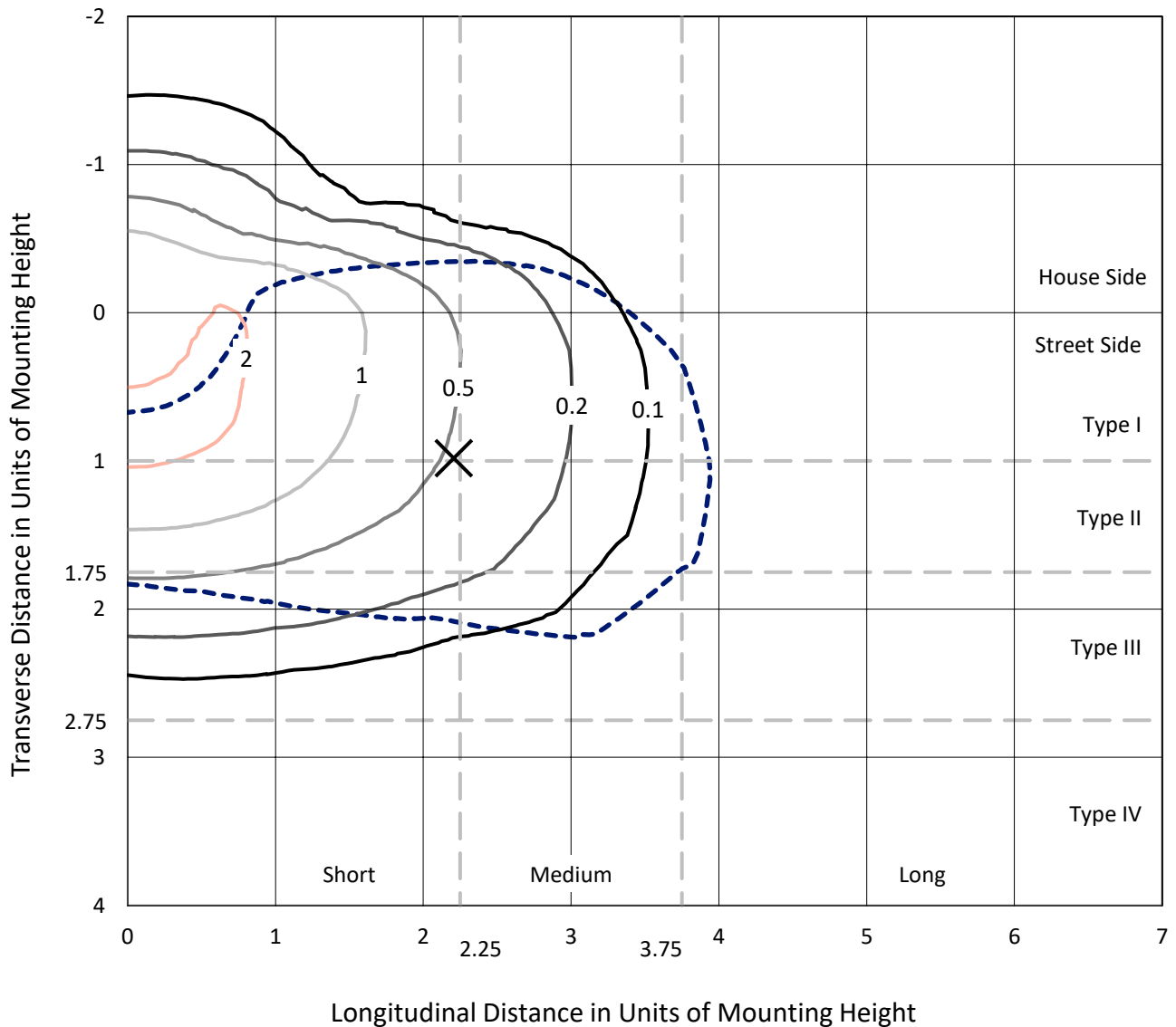
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

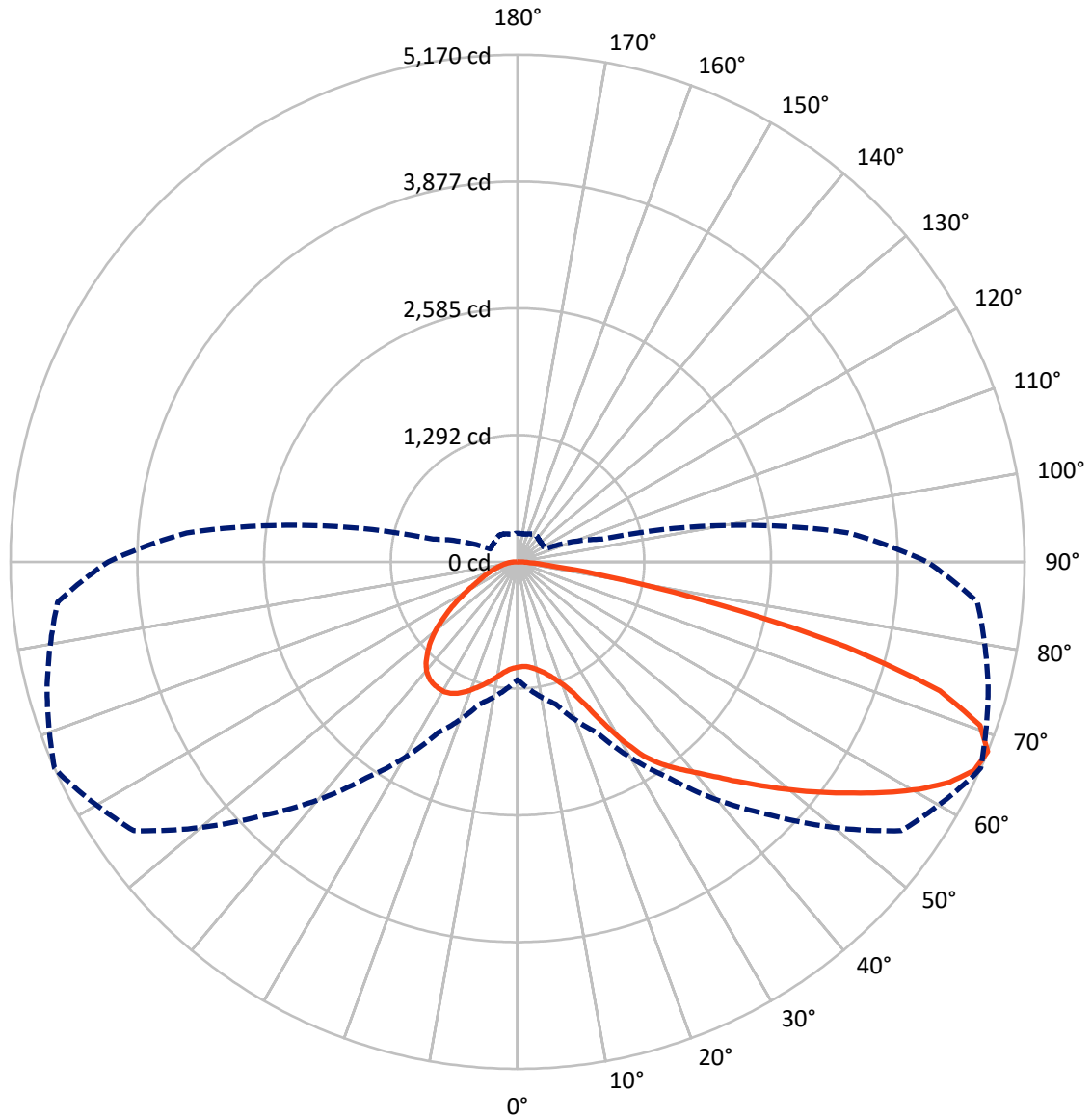
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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
House Side	Lumens	2407.9	0.0	2407.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	7276.2	0.0	7276.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	9684.2	0.0	9684.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	1.1
10°-20°	351.8	3.6
20°-30°	678.1	7.0
30°-40°	1189.0	12.3
40°-50°	1767.7	18.3
50°-60°	2240.8	23.1
60°-70°	2192.5	22.6
70°-80°	1045.9	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°	9684.2	100.0
0°-180°	9684.2	100.0

Coefficient of Utilization



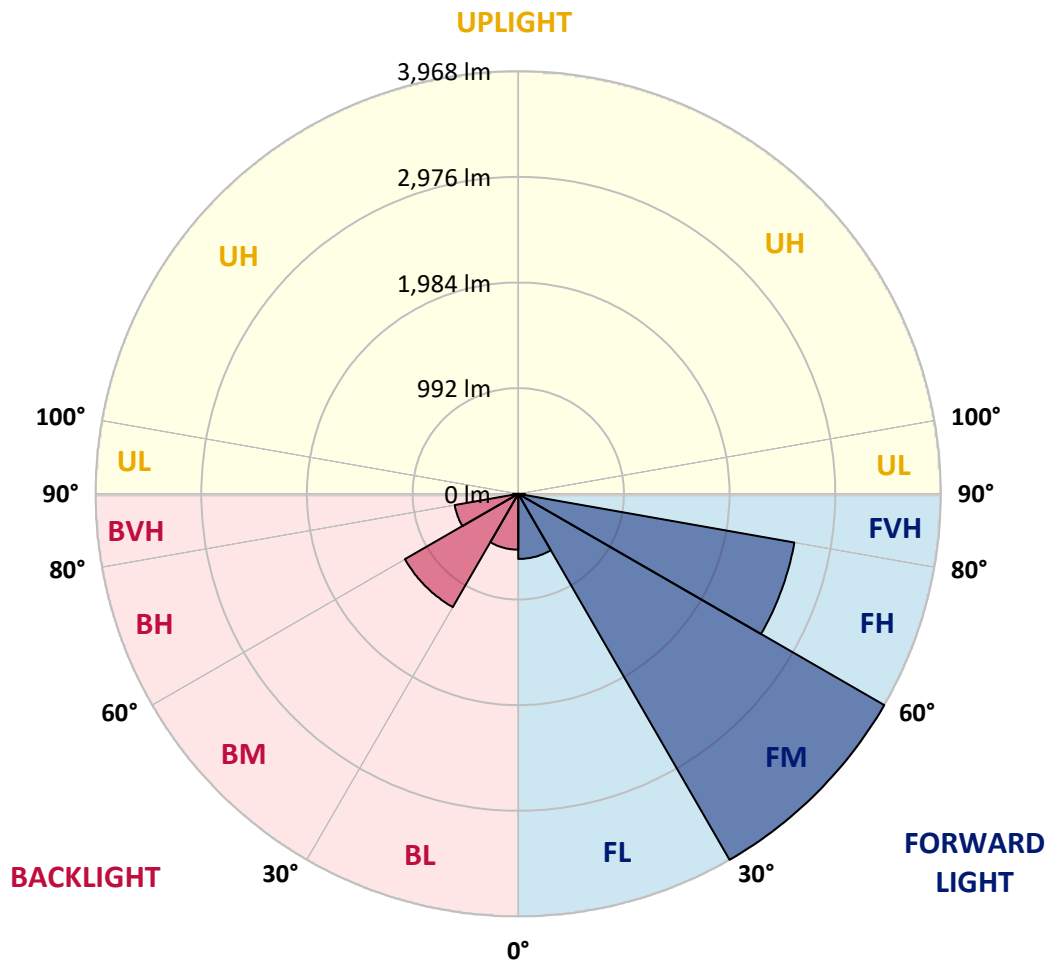
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	611.9	6.3			
FM (30°-60°)	3968.5	41.0			
FH (60°-80°)	2632.4	27.2			G2/5000
FVH (80°-90°)	63.4	0.7			G1/100
BL (0°-30°)	524.5	5.4	B2/1000		
BM (30°-60°)	1229.0	12.7	B2/2500		
BH (60°-80°)	606.0	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1062.9	1069.0	1067.5	1065.0	1064.5	1065.5	1067.0	1068.5	1068.0	1070.5	1074.6
5°	1059.8	1066.0	1065.5	1065.5	1067.5	1071.5	1074.1	1076.7	1074.1	1077.2	1082.7
7.5°	1061.9	1066.5	1068.5	1070.5	1075.6	1083.2	1089.4	1095.0	1091.9	1095.5	1102.6
10°	1087.8	1091.4	1093.5	1093.5	1097.0	1105.7	1111.7	1122.0	1119.4	1124.9	1134.2
12.5°	1135.2	1138.8	1138.8	1136.7	1139.2	1144.8	1146.9	1158.0	1153.4	1162.7	1171.8
15°	1193.2	1200.3	1194.7	1191.2	1192.2	1197.7	1197.2	1205.9	1201.3	1209.0	1217.1
17.5°	1257.3	1266.4	1257.3	1256.8	1254.7	1260.9	1261.4	1268.9	1260.9	1266.4	1272.0
20°	1333.1	1345.8	1338.1	1340.7	1336.2	1338.6	1341.2	1352.4	1339.7	1343.8	1342.2
22.5°	1439.9	1455.2	1447.1	1456.7	1453.7	1451.6	1451.1	1471.0	1451.1	1452.6	1437.9
25°	1595.6	1614.0	1599.7	1612.9	1612.9	1619.6	1627.2	1652.6	1619.6	1609.9	1571.7
27.5°	1825.6	1844.0	1816.0	1824.1	1821.5	1837.8	1829.7	1892.8	1857.2	1841.4	1764.5
30°	2102.4	2135.0	2082.1	2080.0	2077.5	2103.4	2115.1	2156.9	2120.7	2104.9	2012.4
32.5°	2401.6	2435.7	2372.6	2354.3	2344.6	2360.4	2350.7	2384.3	2359.3	2335.0	2220.5
35°	2718.1	2751.7	2691.6	2656.0	2617.3	2584.2	2549.7	2558.3	2534.9	2497.7	2379.2
37.5°	3017.3	3078.8	3015.2	2977.1	2905.9	2841.2	2744.5	2704.4	2682.4	2648.4	2528.8
40°	3322.0	3357.2	3308.8	3276.2	3198.9	3097.7	2943.0	2858.0	2828.5	2795.4	2694.2
42.5°	3546.4	3580.0	3554.1	3531.6	3471.2	3353.6	3153.6	3047.3	3004.6	2967.4	2881.4
45°	3724.5	3749.4	3733.2	3741.4	3715.3	3601.3	3371.9	3250.3	3206.0	3160.8	3093.0
47.5°	3796.3	3822.7	3848.7	3897.0	3941.2	3857.3	3606.5	3470.1	3423.3	3377.0	3310.3
50°	3788.1	3815.0	3890.4	3993.2	4130.5	4102.6	3853.8	3704.1	3660.9	3608.0	3546.4
52.5°	3723.0	3753.6	3850.2	4021.2	4239.9	4286.2	4105.6	3945.8	3905.1	3842.0	3780.5
55°	3552.0	3570.4	3715.3	3957.5	4265.8	4414.5	4352.4	4203.3	4162.6	4074.6	4007.4
57.5°	3235.0	3261.4	3472.7	3786.0	4200.8	4501.5	4569.1	4474.0	4434.9	4308.1	4237.9
60°	2821.4	2863.6	3105.3	3498.1	4034.9	4501.0	4766.0	4740.1	4707.5	4538.1	4464.8
62.5°	2353.3	2402.1	2634.7	3091.1	3744.8	4373.3	4889.1	4962.9	4946.1	4750.3	4656.7
65°	1807.3	1840.9	2072.4	2564.4	3293.5	4099.0	4903.4	5115.1	5118.1	4911.6	4756.9
67.5°	1203.4	1300.0	1501.0	1924.3	2689.1	3650.7	4778.2	5140.1	5169.6	4967.0	4706.5
70°	587.1	714.4	911.3	1250.7	1924.3	2963.4	4451.1	4935.5	5001.2	4805.2	4406.4
72.5°	243.7	285.0	392.3	617.2	1104.6	1999.7	3793.7	4380.8	4502.5	4257.7	3704.7
75°	164.3	178.0	224.4	316.5	503.2	986.0	2735.9	3266.6	3462.4	3215.7	2628.5
77.5°	126.7	135.3	163.3	221.3	299.2	373.0	1464.3	1968.6	2069.9	1916.2	1367.7
80°	99.7	106.3	122.1	161.3	212.2	199.5	499.2	892.0	950.5	797.3	439.6
82.5°	86.5	89.1	87.5	109.4	140.9	116.5	163.8	329.2	363.3	263.5	143.5
85°	62.6	69.7	72.8	67.6	74.8	59.0	67.1	116.5	128.2	114.5	80.9
87.5°	25.4	37.6	46.3	43.8	27.5	16.8	20.9	34.1	39.2	42.7	26.4
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°	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1075.1	1078.7	1081.3	1084.2	1086.3	1089.4	1095.5	1099.0	1099.5	1102.1	1101.6
5°	1084.8	1089.9	1095.5	1103.6	1112.7	1120.4	1132.1	1140.2	1143.3	1145.8	1145.3
7.5°	1105.7	1112.7	1123.0	1137.2	1150.5	1160.6	1174.9	1184.5	1194.2	1197.7	1198.2
10°	1136.7	1146.9	1161.6	1181.0	1195.3	1208.5	1223.2	1231.3	1241.0	1245.1	1247.1
12.5°	1175.4	1186.0	1205.4	1232.4	1245.6	1254.7	1259.8	1257.8	1259.8	1263.4	1264.4
15°	1219.6	1231.3	1253.2	1282.2	1291.4	1283.2	1272.0	1261.9	1260.3	1261.4	1265.0
17.5°	1272.0	1280.6	1306.2	1330.6	1323.9	1290.4	1266.0	1249.7	1241.5	1238.9	1242.5
20°	1345.3	1345.3	1366.1	1381.4	1337.1	1280.2	1242.0	1215.5	1198.7	1191.7	1190.1
22.5°	1434.4	1426.2	1439.4	1428.7	1334.7	1251.7	1198.7	1153.0	1127.5	1117.4	1115.8
25°	1547.3	1537.6	1534.1	1467.9	1316.3	1206.4	1120.4	1065.0	1042.5	1037.0	1038.0
27.5°	1717.8	1693.3	1647.1	1489.3	1282.7	1135.2	1028.8	977.4	964.7	965.2	966.8
30°	1944.7	1895.8	1782.4	1492.8	1227.7	1034.4	935.2	898.5	892.5	895.0	903.6
32.5°	2154.9	2108.5	1920.7	1476.6	1143.3	935.7	851.3	826.9	817.6	820.7	824.8
35°	2319.7	2307.0	2049.0	1453.7	1039.6	843.1	775.9	755.1	737.3	733.2	736.3
37.5°	2475.4	2470.2	2145.1	1421.7	936.7	777.5	715.3	687.9	661.9	647.7	648.2
40°	2646.3	2641.2	2208.3	1372.3	845.6	720.5	660.9	624.8	592.8	566.8	569.4
42.5°	2838.6	2808.6	2238.3	1301.5	768.3	672.1	616.6	567.8	525.6	501.7	503.2
45°	3048.9	2981.1	2237.8	1211.4	703.2	627.9	569.4	500.2	460.9	438.6	437.6
47.5°	3271.7	3146.0	2210.3	1111.7	640.1	579.0	496.1	443.2	417.3	403.4	400.5
50°	3501.6	3300.2	2163.5	997.3	575.4	523.6	450.3	414.2	394.3	381.6	377.0
52.5°	3717.9	3440.1	2107.0	867.6	509.8	469.7	430.0	402.0	381.1	366.8	360.8
55°	3918.9	3560.6	2027.1	734.7	456.4	433.5	420.2	396.9	373.0	356.2	349.5
57.5°	4097.4	3639.1	1889.2	610.1	418.2	408.6	410.1	388.3	360.8	346.6	337.3
60°	4246.1	3696.6	1685.2	494.6	387.2	384.2	394.3	372.0	339.9	323.6	316.5
62.5°	4335.1	3695.5	1434.9	405.0	360.8	361.7	373.5	351.6	319.0	303.8	299.2
65°	4327.4	3604.9	1160.1	346.6	335.3	336.3	351.6	329.2	301.8	292.5	292.0
67.5°	4174.3	3384.1	889.9	308.3	307.3	311.9	329.7	314.0	291.0	290.1	291.5
70°	3759.6	2925.7	641.1	277.8	278.3	285.0	308.3	304.2	285.5	287.5	287.0
72.5°	3014.7	2230.6	430.5	245.8	246.3	257.0	288.0	296.6	279.8	306.8	310.9
75°	2007.8	1391.1	276.8	211.7	212.2	225.9	270.2	281.9	264.6	305.8	308.3
77.5°	964.7	625.4	200.5	178.0	178.0	190.9	233.5	252.4	225.4	237.6	217.8
80°	333.2	235.0	157.7	143.5	140.4	149.0	196.9	218.8	194.3	179.1	167.9
82.5°	131.3	122.1	126.7	111.4	101.3	106.8	153.1	180.6	143.0	129.3	128.7
85°	75.3	79.3	89.6	73.8	58.5	65.6	112.4	129.8	107.8	95.1	97.2
87.5°	20.4	28.0	41.2	38.1	26.4	28.0	53.4	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)