

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: P882389

Luminaire Tested: **NAV-SB2B-727-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882389
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-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10408 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

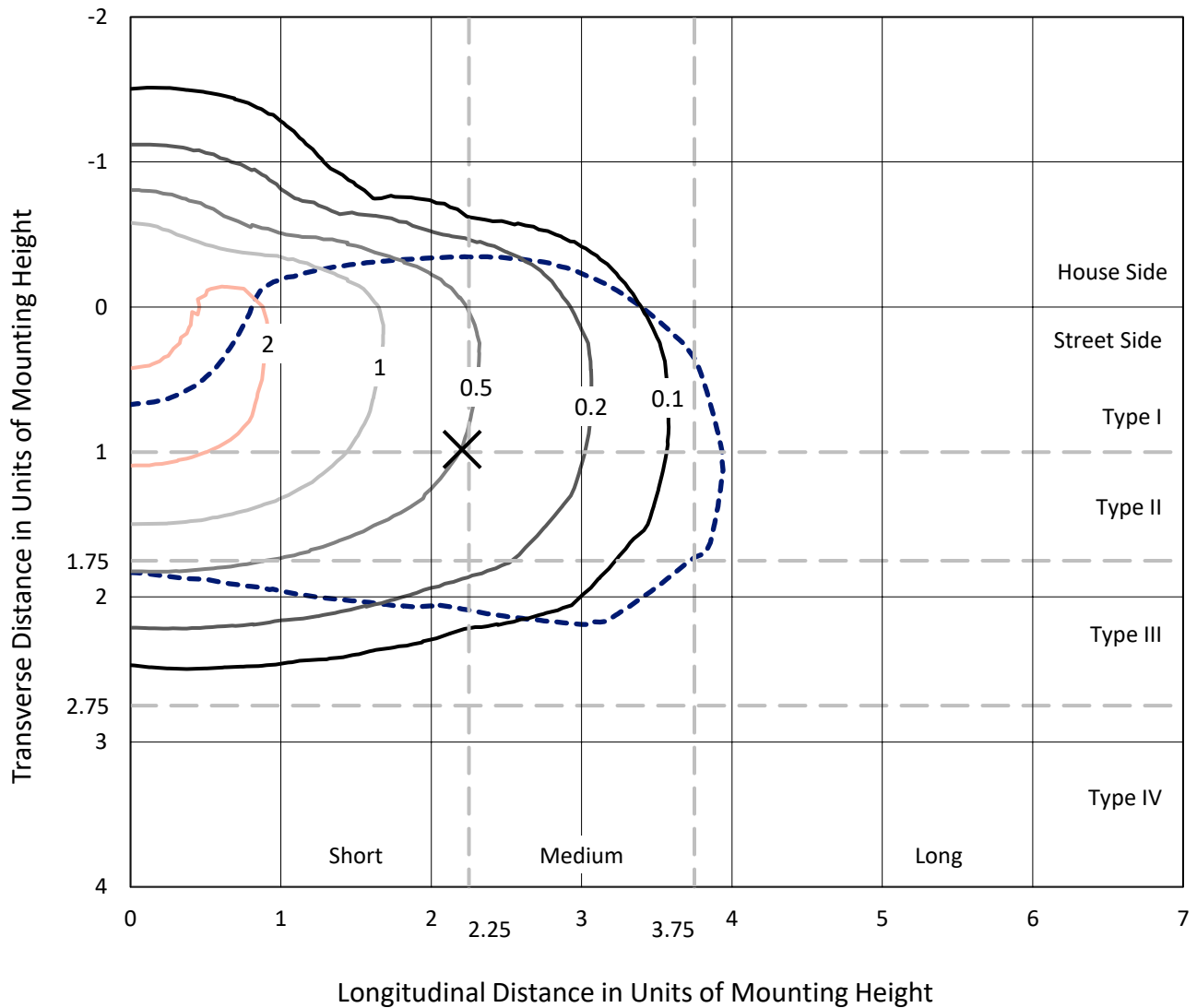
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

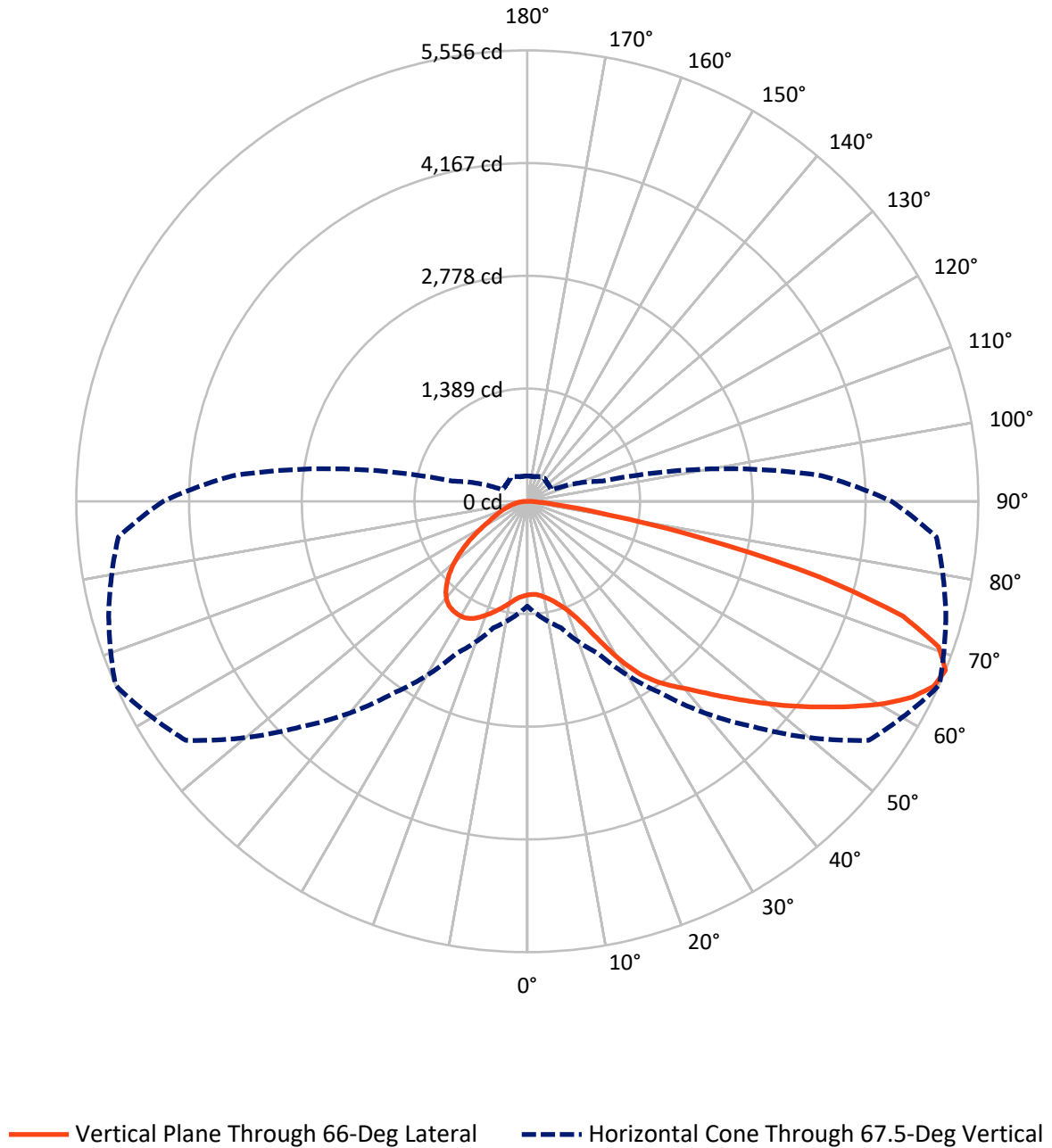
✕ Max cd
 - - - 1/2 Max cd



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



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2587.9	0.0	2587.9
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	7820.1	0.0	7820.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	10408.0	0.0	10408.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	1.1
10°-20°	378.1	3.6
20°-30°	728.8	7.0
30°-40°	1277.9	12.3
40°-50°	1899.8	18.3
50°-60°	2408.2	23.1
60°-70°	2356.4	22.6
70°-80°	1124.0	10.8
80°-90°	120.1	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°	10408.0	100.0
0°-180°	10408.0	100.0

Coefficient of Utilization



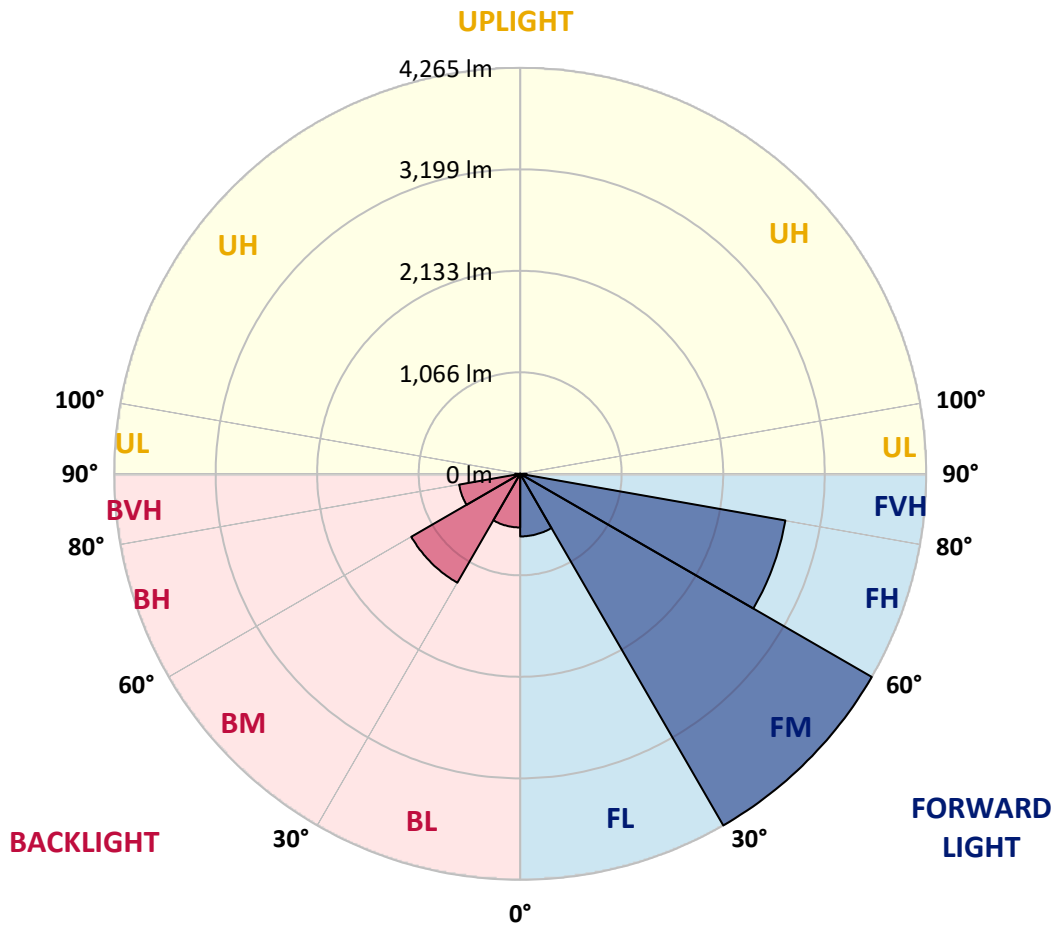
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	657.7	6.3			
FM (30°-60°)	4265.1	41.0			
FH (60°-80°)	2829.2	27.2			G2/5000
FVH (80°-90°)	68.1	0.7			G1/100
BL (0°-30°)	563.7	5.4	B2/1000		
BM (30°-60°)	1320.9	12.7	B2/2500		
BH (60°-80°)	651.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	52.0	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°	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4
2.5°	1142.4	1148.9	1147.3	1144.5	1144.0	1145.1	1146.7	1148.4	1147.8	1150.6	1154.9
5°	1139.1	1145.6	1145.1	1145.1	1147.3	1151.7	1154.4	1157.1	1154.4	1157.7	1163.7
7.5°	1141.3	1146.2	1148.4	1150.6	1156.0	1164.2	1170.8	1176.8	1173.5	1177.4	1185.0
10°	1169.1	1173.0	1175.2	1175.2	1179.0	1188.3	1194.9	1205.8	1203.1	1209.1	1218.9
12.5°	1220.0	1223.8	1223.8	1221.6	1224.4	1230.4	1232.6	1244.6	1239.7	1249.5	1259.4
15°	1282.3	1290.0	1284.0	1280.2	1281.3	1287.3	1286.7	1296.0	1291.1	1299.3	1308.0
17.5°	1351.2	1361.1	1351.2	1350.7	1348.5	1355.1	1355.6	1363.8	1355.1	1361.1	1367.1
20°	1432.7	1446.4	1438.2	1440.9	1436.0	1438.7	1441.5	1453.5	1439.8	1444.2	1442.6
22.5°	1547.6	1564.0	1555.2	1565.6	1562.3	1560.1	1559.6	1580.9	1559.6	1561.2	1545.4
25°	1714.9	1734.6	1719.3	1733.5	1733.5	1740.6	1748.8	1776.1	1740.6	1730.2	1689.2
27.5°	1962.1	1981.8	1951.7	1960.4	1957.7	1975.2	1966.4	2034.3	1996.0	1979.0	1896.5
30°	2259.6	2294.6	2237.7	2235.5	2232.8	2260.6	2273.2	2318.1	2279.2	2262.3	2162.8
32.5°	2581.1	2617.7	2549.9	2530.2	2519.9	2536.8	2526.4	2562.5	2535.7	2509.5	2386.4
35°	2921.2	2957.3	2892.8	2854.5	2813.0	2777.4	2740.2	2749.5	2724.4	2684.5	2557.0
37.5°	3242.8	3308.9	3240.6	3199.6	3123.0	3053.6	2949.7	2906.5	2883.0	2846.3	2717.8
40°	3570.3	3608.1	3556.1	3521.1	3438.0	3329.2	3162.9	3071.6	3039.9	3004.4	2895.5
42.5°	3811.5	3847.6	3819.7	3795.6	3730.6	3604.2	3389.3	3275.0	3229.1	3189.2	3096.8
45°	4002.9	4029.7	4012.2	4020.9	3993.0	3870.6	3623.9	3493.2	3445.7	3397.0	3324.3
47.5°	4080.0	4108.4	4136.3	4188.3	4235.8	4145.6	3876.0	3729.5	3679.2	3629.4	3557.8
50°	4071.2	4100.2	4181.2	4291.6	4439.3	4409.2	4141.8	3981.0	3934.5	3877.7	3811.5
52.5°	4001.2	4034.1	4138.0	4321.7	4556.8	4606.6	4412.5	4240.8	4197.0	4129.2	4063.0
55°	3817.5	3837.2	3993.0	4253.3	4584.7	4744.4	4677.7	4517.5	4473.7	4379.1	4306.9
57.5°	3476.8	3505.3	3732.2	4069.1	4514.7	4837.9	4910.6	4808.4	4766.3	4630.1	4554.7
60°	3032.2	3077.6	3337.4	3759.5	4336.5	4837.4	5122.3	5094.4	5059.4	4877.3	4798.5
62.5°	2529.1	2581.6	2831.6	3322.1	4024.8	4700.1	5254.6	5333.9	5315.9	5105.3	5004.7
65°	1942.4	1978.5	2227.3	2756.1	3539.7	4405.4	5269.9	5497.4	5500.7	5278.7	5112.4
67.5°	1293.3	1397.2	1613.2	2068.2	2890.1	3923.6	5135.4	5524.2	5555.9	5338.3	5058.3
70°	631.1	767.8	979.4	1344.1	2068.2	3184.8	4783.8	5304.4	5374.9	5164.4	4735.7
72.5°	261.9	306.2	421.6	663.3	1187.2	2149.1	4077.3	4708.3	4839.0	4576.0	3981.6
75°	176.6	191.4	241.2	340.1	540.8	1059.8	2940.4	3510.7	3721.3	3456.0	2825.0
77.5°	136.2	145.5	175.5	237.9	321.5	400.8	1573.8	2115.7	2224.6	2059.4	1469.9
80°	107.2	114.3	131.2	173.3	228.0	214.4	536.5	958.6	1021.5	856.9	472.5
82.5°	93.0	95.7	94.1	117.6	151.5	125.2	176.1	353.8	390.4	283.3	154.2
85°	67.3	74.9	78.2	72.7	80.4	63.4	72.2	125.2	137.8	123.0	86.9
87.5°	27.3	40.5	49.8	47.0	29.5	18.0	22.4	36.6	42.1	45.9	28.4
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°	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4	1154.4
2.5°	1155.5	1159.3	1162.0	1165.3	1167.5	1170.8	1177.4	1181.2	1181.7	1184.5	1183.9
5°	1165.9	1171.3	1177.4	1186.1	1195.9	1204.1	1216.7	1225.5	1228.8	1231.5	1230.9
7.5°	1188.3	1195.9	1206.9	1222.2	1236.4	1247.3	1262.7	1273.0	1283.4	1287.3	1287.8
10°	1221.6	1232.6	1248.4	1269.2	1284.5	1298.8	1314.6	1323.4	1333.7	1338.1	1340.3
12.5°	1263.2	1274.7	1295.5	1324.5	1338.7	1348.5	1354.0	1351.8	1354.0	1357.8	1358.9
15°	1310.8	1323.4	1346.9	1378.0	1387.9	1379.1	1367.1	1356.2	1354.5	1355.6	1359.5
17.5°	1367.1	1376.4	1403.7	1430.0	1422.9	1386.8	1360.5	1343.0	1334.3	1331.6	1335.4
20°	1445.9	1445.9	1468.3	1484.7	1437.1	1375.9	1334.8	1306.4	1288.4	1280.7	1279.1
22.5°	1541.5	1532.8	1547.0	1535.5	1434.4	1345.2	1288.4	1239.1	1211.8	1200.9	1199.2
25°	1662.9	1652.6	1648.7	1577.6	1414.7	1296.6	1204.1	1144.5	1120.5	1114.5	1115.6
27.5°	1846.1	1819.9	1770.1	1600.6	1378.6	1220.0	1105.7	1050.5	1036.8	1037.4	1039.0
30°	2090.0	2037.5	1915.6	1604.4	1319.5	1111.7	1005.1	965.7	959.2	961.9	971.2
32.5°	2315.9	2266.1	2064.3	1586.9	1228.8	1005.6	914.9	888.6	878.8	882.1	886.4
35°	2493.1	2479.4	2202.1	1562.3	1117.2	906.1	833.9	811.5	792.4	788.0	791.3
37.5°	2660.4	2654.9	2305.5	1527.9	1006.7	835.6	768.9	739.3	711.4	696.1	696.7
40°	2844.1	2838.7	2373.3	1474.8	908.9	774.3	710.3	671.5	637.1	609.2	611.9
42.5°	3050.8	3018.6	2405.6	1398.8	825.7	722.4	662.8	610.3	564.9	539.2	540.8
45°	3276.7	3204.0	2405.0	1302.0	755.7	674.8	611.9	537.5	495.4	471.4	470.3
47.5°	3516.2	3381.1	2375.5	1194.9	687.9	622.3	533.2	476.3	448.4	433.6	430.4
50°	3763.4	3546.8	2325.2	1071.8	618.5	562.7	484.0	445.1	423.8	410.1	405.2
52.5°	3995.8	3697.2	2264.5	932.4	547.9	504.7	462.1	432.0	409.6	394.3	387.7
55°	4211.8	3826.8	2178.6	789.6	490.5	465.9	451.7	426.5	400.8	382.8	375.7
57.5°	4403.7	3911.0	2030.4	655.7	449.5	439.1	440.8	417.2	387.7	372.4	362.6
60°	4563.4	3972.8	1811.1	531.5	416.1	412.9	423.8	399.7	365.3	347.8	340.1
62.5°	4659.1	3971.7	1542.1	435.3	387.7	388.8	401.4	377.9	342.9	326.5	321.5
65°	4650.9	3874.4	1246.8	372.4	360.4	361.5	377.9	353.8	324.3	314.4	313.9
67.5°	4486.3	3637.1	956.4	331.4	330.3	335.2	354.4	337.4	312.8	311.7	313.3
70°	4040.6	3144.3	689.0	298.6	299.1	306.2	331.4	327.0	306.8	309.0	308.4
72.5°	3240.0	2397.4	462.6	264.1	264.7	276.2	309.5	318.8	300.8	329.7	334.1
75°	2157.8	1495.1	297.5	227.5	228.0	242.8	290.4	303.0	284.4	328.7	331.4
77.5°	1036.8	672.1	215.5	191.4	191.4	205.1	251.0	271.2	242.3	255.4	234.0
80°	358.2	252.6	169.5	154.2	150.9	160.2	211.6	235.1	208.9	192.5	180.5
82.5°	141.1	131.2	136.2	119.8	108.8	114.8	164.6	194.1	153.7	138.9	138.4
85°	80.9	85.3	96.2	79.3	62.9	70.5	120.9	139.4	115.9	102.3	104.4
87.5°	21.9	30.1	44.3	41.0	28.4	30.1	57.4	77.1	66.7	51.4	53.0
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)