

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: P882089

Luminaire Tested: **NAV-SB1D-750-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882089
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-750-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 5000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10988 lumens
Efficiency: N/A
Efficacy: 138.0 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

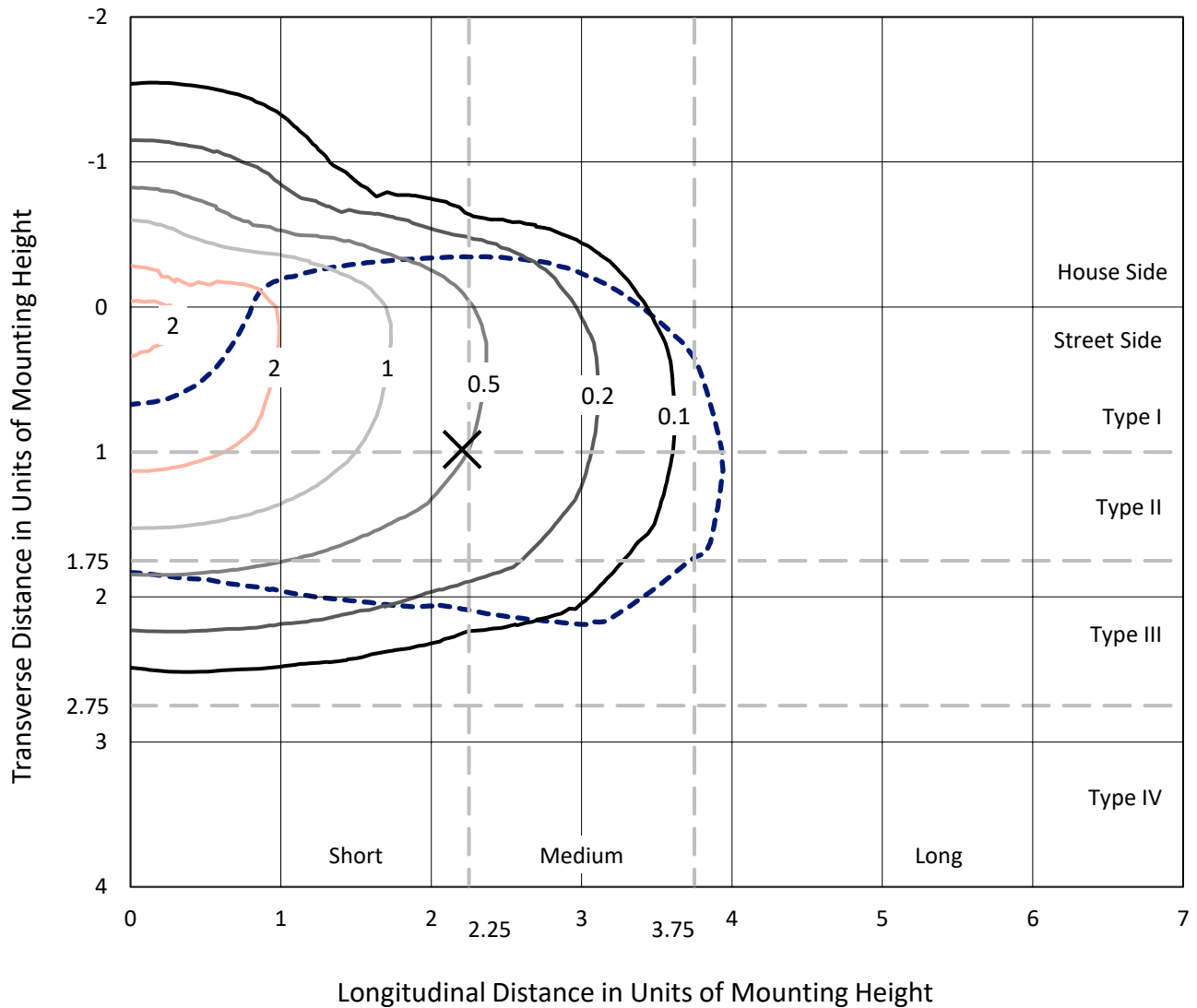
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

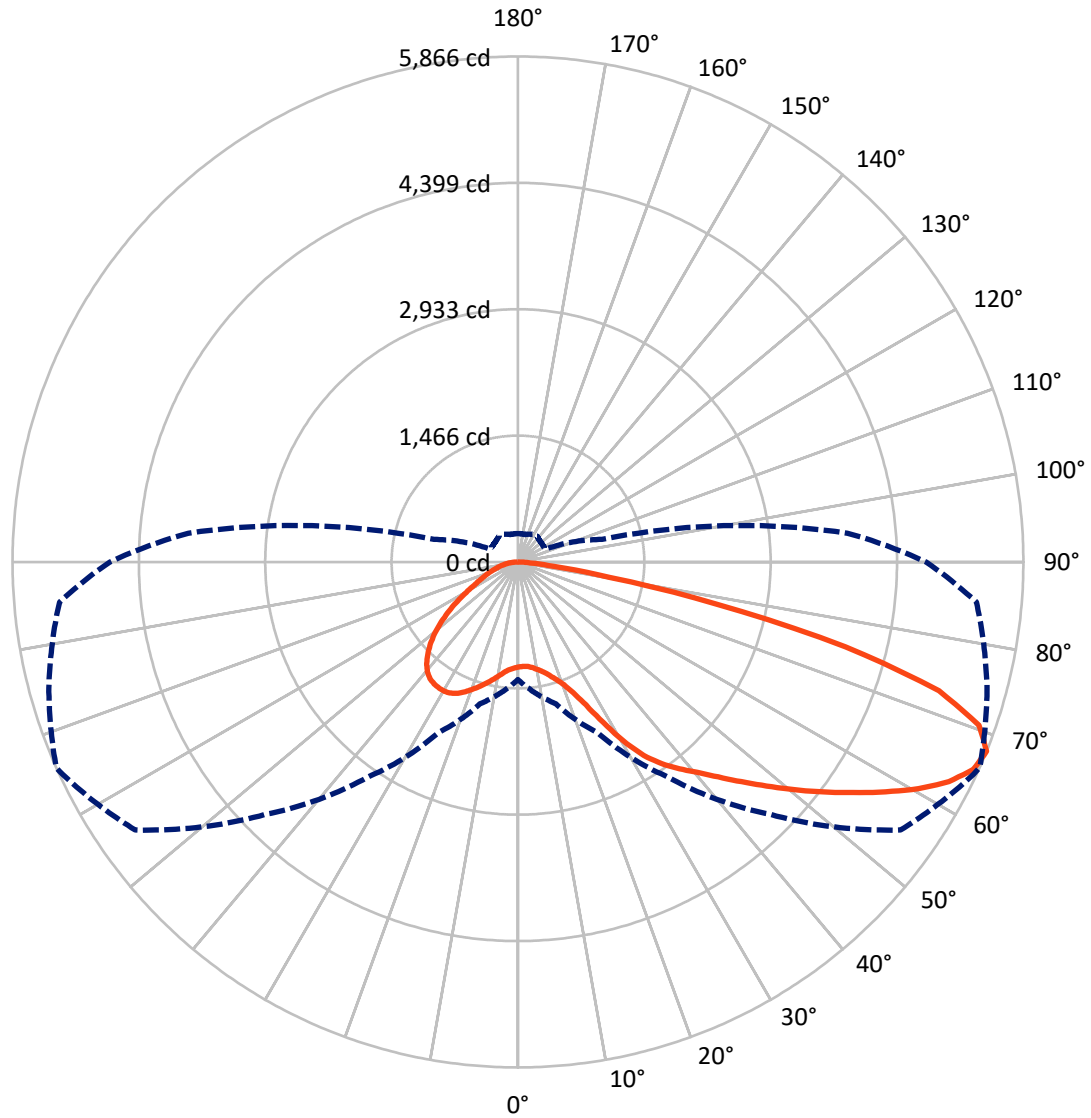
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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	2732.1	0.0	2732.1
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	8255.9	0.0	8255.9
	% Fixture	75.1	0.0	75.1
Total	Lumens	10988.0	0.0	10988.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	1.1
10°-20°	399.2	3.6
20°-30°	769.5	7.0
30°-40°	1349.1	12.3
40°-50°	2005.7	18.3
50°-60°	2542.4	23.1
60°-70°	2487.7	22.6
70°-80°	1186.7	10.8
80°-90°	126.8	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°	10988.0	100.0
0°-180°	10988.0	100.0

Coefficient of Utilization



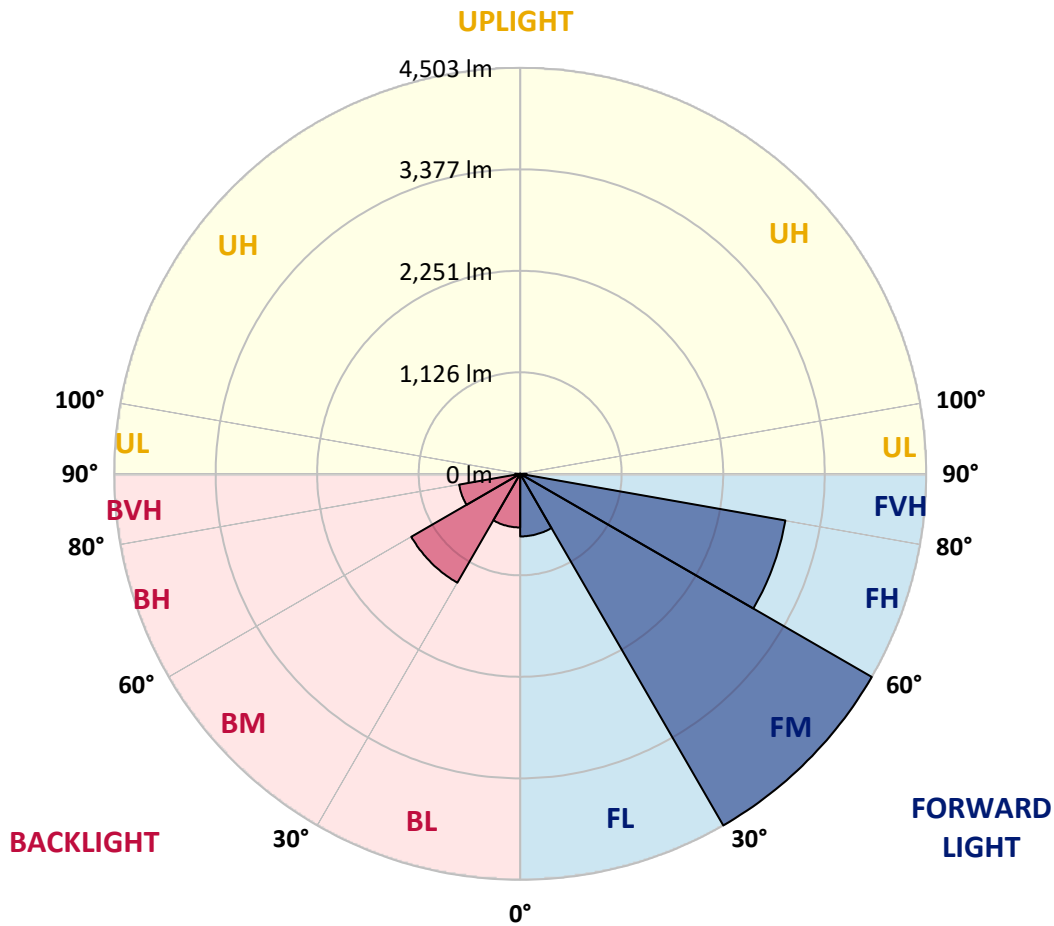
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	694.3	6.3			
FM (30°-60°)	4502.8	41.0			
FH (60°-80°)	2986.8	27.2			G2/5000
FVH (80°-90°)	71.9	0.7			G1/100
BL (0°-30°)	595.2	5.4	B2/1000		
BM (30°-60°)	1394.5	12.7	B2/2500		
BH (60°-80°)	687.5	6.3	B2/1000		G2/1000
BVH (80°-90°)	54.9	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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 CATALOG NUMBER: NAV-SB1D-750-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7
2.5°	1206.0	1212.9	1211.2	1208.3	1207.7	1208.9	1210.6	1212.4	1211.8	1214.7	1219.3
5°	1202.5	1209.5	1208.9	1208.9	1211.2	1215.8	1218.7	1221.6	1218.7	1222.2	1228.5
7.5°	1204.9	1210.1	1212.4	1214.7	1220.4	1229.1	1236.0	1242.4	1238.9	1243.0	1251.0
10°	1234.3	1238.3	1240.7	1240.7	1244.7	1254.5	1261.4	1273.0	1270.1	1276.4	1286.8
12.5°	1288.0	1292.0	1292.0	1289.7	1292.6	1299.0	1301.3	1314.0	1308.8	1319.2	1329.6
15°	1353.8	1361.9	1355.5	1351.5	1352.7	1359.0	1358.4	1368.2	1363.0	1371.7	1380.9
17.5°	1426.5	1436.9	1426.5	1426.0	1423.7	1430.6	1431.2	1439.8	1430.6	1436.9	1443.3
20°	1512.6	1527.0	1518.3	1521.2	1516.0	1518.9	1521.8	1534.5	1520.1	1524.7	1523.0
22.5°	1633.8	1651.1	1641.9	1652.9	1649.4	1647.1	1646.5	1669.0	1646.5	1648.2	1631.5
25°	1810.5	1831.2	1815.1	1830.1	1830.1	1837.6	1846.3	1875.1	1837.6	1826.6	1783.3
27.5°	2071.4	2092.2	2060.4	2069.7	2066.8	2085.3	2076.0	2147.6	2107.2	2089.3	2002.1
30°	2385.5	2422.4	2362.4	2360.1	2357.2	2386.6	2399.9	2447.2	2406.3	2388.4	2283.3
32.5°	2724.9	2763.6	2692.0	2671.2	2660.3	2678.2	2667.2	2705.3	2677.0	2649.3	2519.4
35°	3084.0	3122.1	3054.0	3013.6	2969.7	2932.2	2892.9	2902.7	2876.2	2834.0	2699.5
37.5°	3423.5	3493.3	3421.2	3377.9	3297.1	3223.7	3114.0	3068.4	3043.6	3004.9	2869.3
40°	3769.3	3809.1	3754.3	3717.3	3629.6	3514.7	3339.2	3242.8	3209.3	3171.8	3056.9
42.5°	4023.9	4062.0	4032.6	4007.2	3938.5	3805.1	3578.2	3457.5	3409.1	3366.9	3269.3
45°	4226.0	4254.2	4235.8	4245.0	4215.6	4086.2	3825.9	3687.9	3637.7	3586.3	3509.5
47.5°	4307.4	4337.4	4366.8	4421.7	4471.9	4376.6	4092.0	3937.3	3884.2	3831.6	3756.0
50°	4298.1	4328.7	4414.2	4530.8	4686.7	4654.9	4372.6	4202.9	4153.8	4093.7	4023.9
52.5°	4224.2	4258.9	4368.6	4562.5	4810.8	4863.3	4658.4	4477.1	4430.9	4359.3	4289.5
55°	4030.2	4051.0	4215.6	4490.4	4840.2	5008.8	4938.4	4769.2	4723.0	4623.1	4546.9
57.5°	3670.6	3700.6	3940.2	4295.8	4766.3	5107.5	5184.3	5076.3	5031.9	4888.1	4808.5
60°	3201.2	3249.1	3523.4	3969.0	4578.1	5106.9	5407.7	5378.3	5341.3	5149.1	5065.9
62.5°	2670.1	2725.5	2989.3	3507.2	4249.0	4962.0	5547.4	5631.1	5612.1	5389.8	5283.6
65°	2050.6	2088.7	2351.4	2909.7	3737.0	4650.9	5563.6	5803.8	5807.2	5572.8	5397.3
67.5°	1365.4	1475.0	1703.1	2183.4	3051.1	4142.2	5421.6	5832.0	5865.5	5635.8	5340.2
70°	666.2	810.6	1034.0	1419.0	2183.4	3362.3	5050.4	5600.0	5674.4	5452.2	4999.6
72.5°	276.5	323.3	445.1	700.3	1253.4	2268.9	4304.5	4970.7	5108.7	4831.0	4203.4
75°	186.5	202.1	254.6	359.1	571.0	1118.8	3104.2	3706.4	3928.6	3648.6	2982.4
77.5°	143.8	153.6	185.3	251.1	339.5	423.2	1661.5	2233.6	2348.5	2174.2	1551.8
80°	113.2	120.7	138.6	183.0	240.7	226.3	566.3	1012.0	1078.4	904.7	498.8
82.5°	98.1	101.0	99.3	124.1	159.9	132.2	185.9	373.5	412.2	299.0	162.8
85°	71.0	79.1	82.6	76.8	84.9	67.0	76.2	132.2	145.5	129.9	91.8
87.5°	28.9	42.7	52.5	49.6	31.2	19.1	23.7	38.7	44.5	48.5	30.0
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: P882089
 CATALOG NUMBER: NAV-SB1D-750-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7	1218.7
2.5°	1219.9	1223.9	1226.8	1230.3	1232.6	1236.0	1243.0	1247.0	1247.6	1250.5	1249.9
5°	1230.8	1236.6	1243.0	1252.2	1262.6	1271.3	1284.5	1293.8	1297.2	1300.1	1299.5
7.5°	1254.5	1262.6	1274.1	1290.3	1305.3	1316.9	1333.0	1344.0	1355.0	1359.0	1359.6
10°	1289.7	1301.3	1318.0	1340.0	1356.1	1371.1	1387.9	1397.1	1408.1	1412.7	1415.0
12.5°	1333.6	1345.7	1367.7	1398.3	1413.3	1423.7	1429.4	1427.1	1429.4	1433.5	1434.6
15°	1383.8	1397.1	1421.9	1454.8	1465.2	1456.0	1443.3	1431.7	1430.0	1431.2	1435.2
17.5°	1443.3	1453.1	1482.0	1509.7	1502.2	1464.1	1436.4	1417.9	1408.7	1405.8	1409.8
20°	1526.4	1526.4	1550.1	1567.4	1517.2	1452.5	1409.2	1379.2	1360.2	1352.1	1350.3
22.5°	1627.5	1618.2	1633.2	1621.1	1514.3	1420.2	1360.2	1308.2	1279.3	1267.8	1266.1
25°	1755.6	1744.6	1740.6	1665.6	1493.5	1368.8	1271.3	1208.3	1182.9	1176.6	1177.7
27.5°	1949.0	1921.3	1868.8	1689.8	1455.4	1288.0	1167.3	1109.0	1094.6	1095.2	1096.9
30°	2206.5	2151.1	2022.3	1693.8	1393.1	1173.7	1061.1	1019.5	1012.6	1015.5	1025.3
32.5°	2444.9	2392.4	2179.4	1675.4	1297.2	1061.7	965.8	938.1	927.7	931.2	935.8
35°	2632.0	2617.6	2324.9	1649.4	1179.5	956.6	880.4	856.7	836.5	831.9	835.4
37.5°	2808.6	2802.9	2434.0	1613.0	1062.8	882.1	811.7	780.5	751.1	734.9	735.5
40°	3002.6	2996.8	2505.6	1557.0	959.5	817.5	749.9	708.9	672.6	643.1	646.0
42.5°	3220.8	3186.8	2539.6	1476.8	871.7	762.6	699.7	644.3	596.4	569.2	571.0
45°	3459.3	3382.5	2539.0	1374.6	797.9	712.4	646.0	567.5	523.0	497.6	496.5
47.5°	3712.1	3569.5	2507.9	1261.4	726.3	657.0	562.9	502.8	473.4	457.8	454.3
50°	3973.1	3744.5	2454.7	1131.5	652.9	594.1	510.9	469.9	447.4	433.0	427.8
52.5°	4218.4	3903.2	2390.7	984.3	578.5	532.9	487.8	456.1	432.4	416.2	409.3
55°	4446.5	4040.1	2300.0	833.6	517.9	491.9	476.9	450.3	423.2	404.1	396.6
57.5°	4649.1	4129.0	2143.6	692.2	474.6	463.6	465.3	440.5	409.3	393.2	382.8
60°	4817.7	4194.2	1912.1	561.2	439.3	435.9	447.4	422.0	385.6	367.2	359.1
62.5°	4918.7	4193.0	1628.0	459.5	409.3	410.5	423.8	398.9	362.0	344.7	339.5
65°	4910.1	4090.3	1316.3	393.2	380.5	381.6	398.9	373.5	342.3	332.0	331.4
67.5°	4736.3	3839.7	1009.7	349.9	348.7	353.9	374.1	356.2	330.2	329.1	330.8
70°	4265.8	3319.6	727.4	315.2	315.8	323.3	349.9	345.2	323.9	326.2	325.6
72.5°	3420.6	2531.0	488.4	278.8	279.4	291.5	326.8	336.6	317.5	348.1	352.7
75°	2278.1	1578.4	314.1	240.2	240.7	256.3	306.6	319.8	300.2	347.0	349.9
77.5°	1094.6	709.5	227.5	202.1	202.1	216.5	265.0	286.3	255.8	269.6	247.1
80°	378.1	266.7	179.0	162.8	159.3	169.2	223.4	248.2	220.5	203.2	190.5
82.5°	148.9	138.6	143.8	126.4	114.9	121.2	173.8	204.9	162.2	146.6	146.1
85°	85.4	90.1	101.6	83.7	66.4	74.5	127.6	147.2	122.4	108.0	110.3
87.5°	23.1	31.8	46.8	43.3	30.0	31.8	60.6	81.4	70.4	54.3	56.0
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)