

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: P882059

Luminaire Tested: **NAV-SB1D-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882059
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-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10032 lumens
Efficiency: N/A
Efficacy: 126.0 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

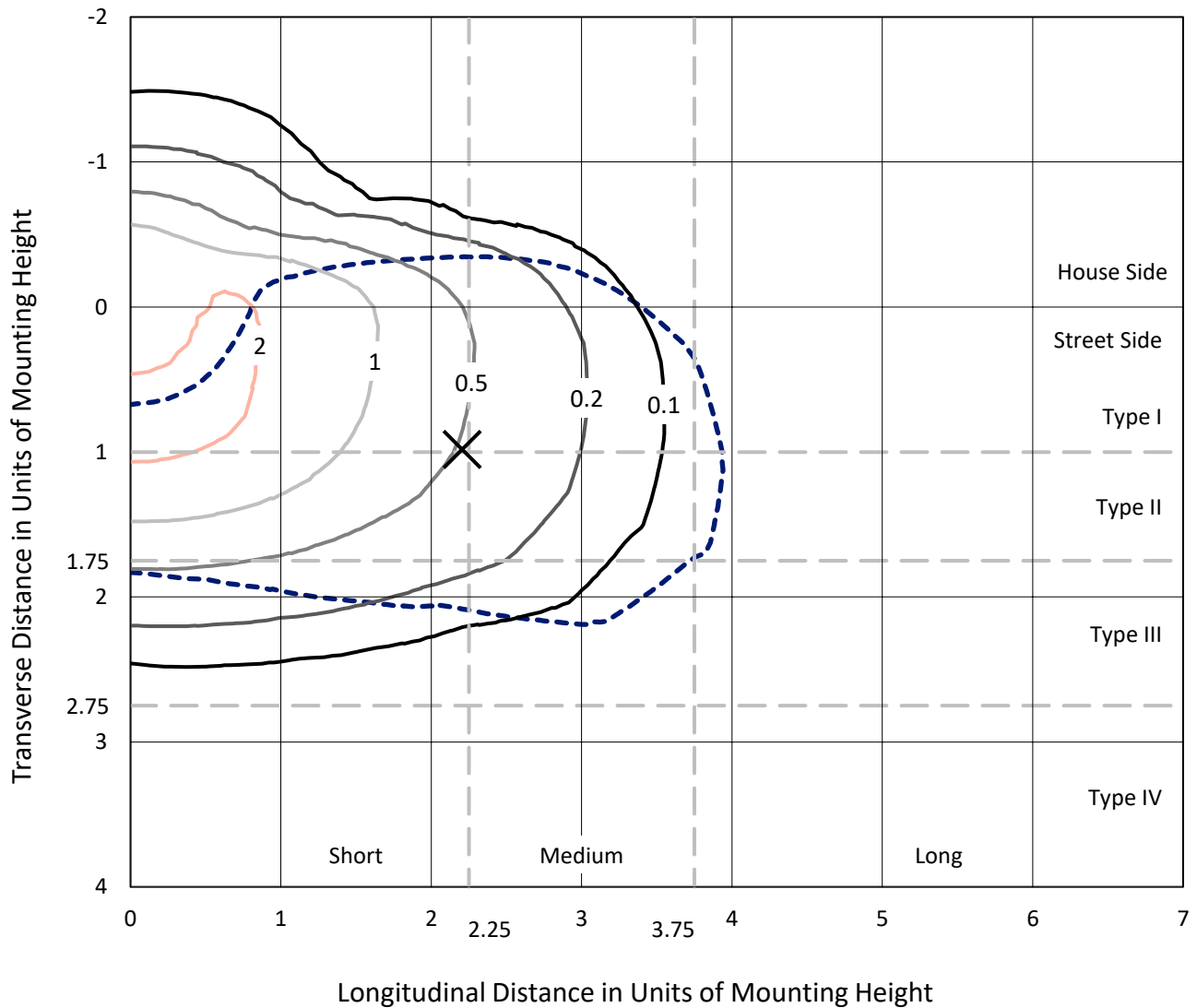
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

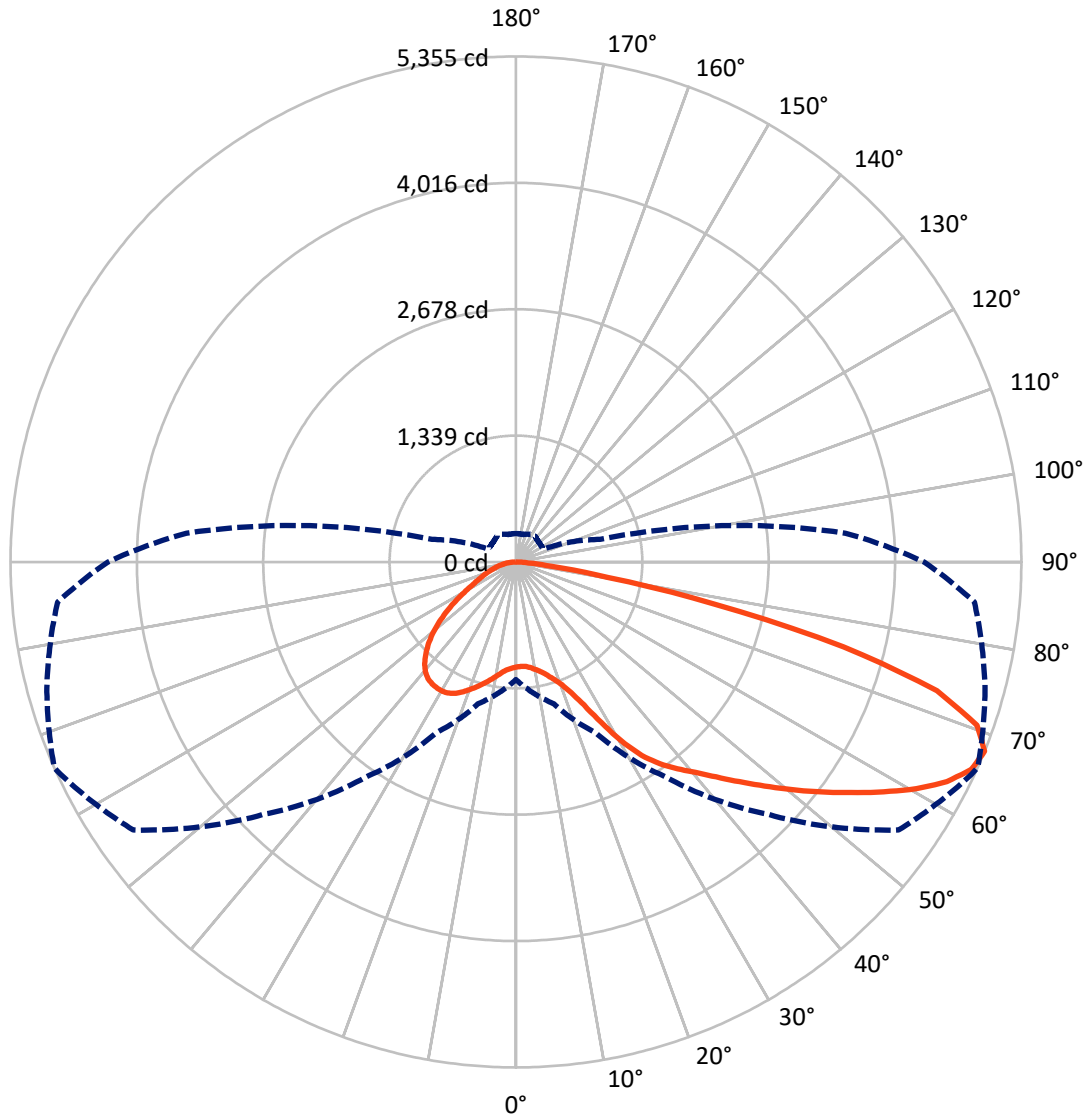
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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	2494.4	0.0	2494.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	7537.6	0.0	7537.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	10032.0	0.0	10032.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.3	1.1
10°-20°	364.5	3.6
20°-30°	702.5	7.0
30°-40°	1231.8	12.3
40°-50°	1831.2	18.3
50°-60°	2321.2	23.1
60°-70°	2271.3	22.6
70°-80°	1083.4	10.8
80°-90°	115.8	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°	10032.0	100.0
0°-180°	10032.0	100.0

Coefficient of Utilization



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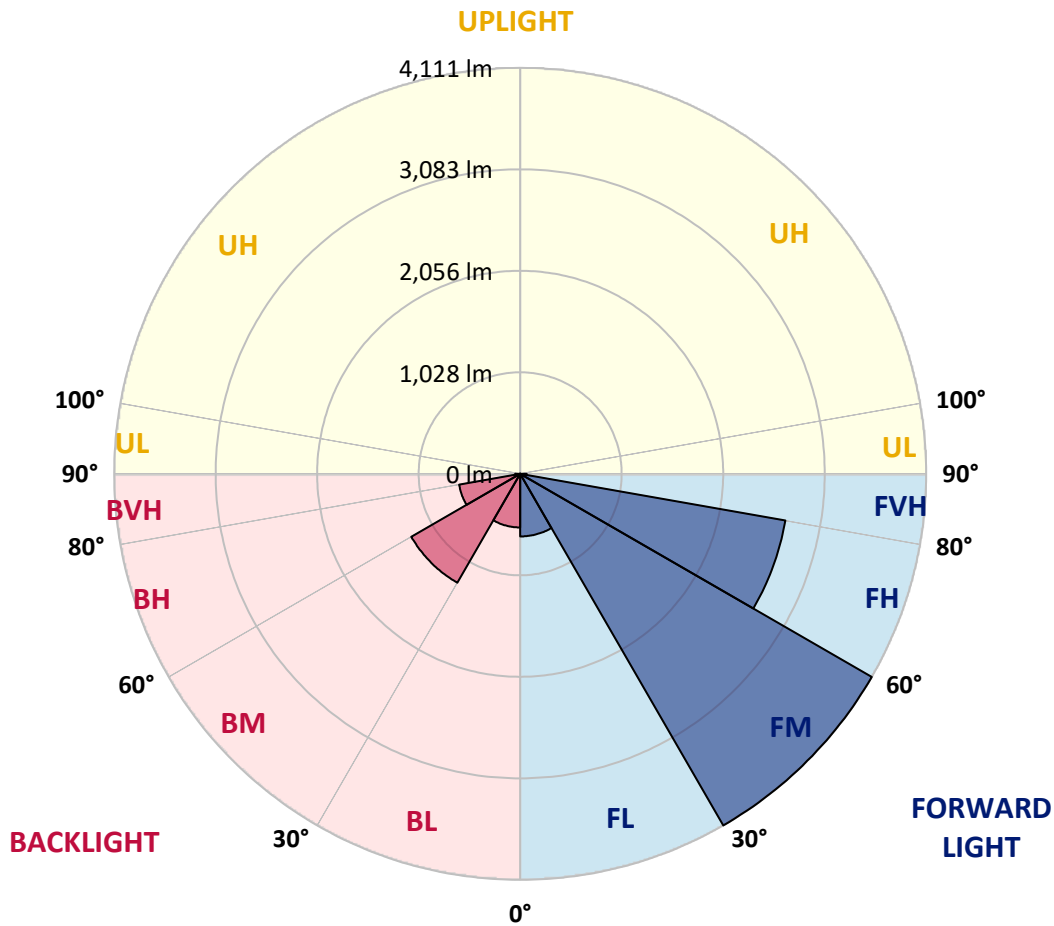
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	633.9	6.3			
FM (30°-60°)	4111.0	41.0			
FH (60°-80°)	2727.0	27.2			G2/5000
FVH (80°-90°)	65.6	0.7			G1/100
BL (0°-30°)	543.4	5.4	B2/1000		
BM (30°-60°)	1273.2	12.7	B2/2500		
BH (60°-80°)	627.7	6.3	B2/1000		G2/1000
BVH (80°-90°)	50.1	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°	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7
2.5°	1101.1	1107.4	1105.8	1103.2	1102.7	1103.7	1105.3	1106.9	1106.4	1109.0	1113.2
5°	1097.9	1104.2	1103.7	1103.7	1105.8	1110.0	1112.7	1115.3	1112.7	1115.8	1121.6
7.5°	1100.0	1104.8	1106.9	1109.0	1114.3	1122.2	1128.5	1134.3	1131.1	1134.8	1142.2
10°	1126.9	1130.6	1132.7	1132.7	1136.4	1145.4	1151.7	1162.2	1159.6	1165.4	1174.9
12.5°	1175.9	1179.6	1179.6	1177.5	1180.1	1185.9	1188.1	1199.7	1194.9	1204.4	1213.9
15°	1236.0	1243.4	1237.6	1233.9	1235.0	1240.8	1240.2	1249.2	1244.5	1252.4	1260.8
17.5°	1302.4	1311.9	1302.4	1301.9	1299.8	1306.1	1306.6	1314.6	1306.1	1311.9	1317.7
20°	1381.0	1394.1	1386.2	1388.9	1384.1	1386.8	1389.4	1401.0	1387.8	1392.0	1390.5
22.5°	1491.7	1507.5	1499.0	1509.1	1505.9	1503.8	1503.3	1523.8	1503.3	1504.8	1489.5
25°	1652.9	1671.9	1657.2	1670.9	1670.9	1677.7	1685.6	1712.0	1677.7	1667.7	1628.2
27.5°	1891.2	1910.2	1881.2	1889.6	1887.0	1903.8	1895.4	1960.8	1923.9	1907.5	1827.9
30°	2177.9	2211.7	2156.8	2154.7	2152.1	2179.0	2191.1	2234.3	2196.9	2180.6	2084.6
32.5°	2487.9	2523.2	2457.8	2438.8	2428.8	2445.2	2435.1	2469.9	2444.1	2418.8	2300.2
35°	2815.7	2850.5	2788.3	2751.4	2711.3	2677.1	2641.2	2650.2	2625.9	2587.5	2464.7
37.5°	3125.6	3189.4	3123.5	3084.0	3010.2	2943.3	2843.1	2801.5	2778.8	2743.5	2619.6
40°	3441.4	3477.7	3427.6	3393.9	3313.8	3208.9	3048.7	2960.6	2930.1	2895.8	2790.9
42.5°	3673.8	3708.6	3681.7	3658.5	3595.8	3474.0	3266.9	3156.7	3112.5	3074.0	2984.9
45°	3858.3	3884.1	3867.2	3875.7	3848.8	3730.7	3493.0	3367.0	3321.2	3274.3	3204.2
47.5°	3932.6	3960.0	3986.9	4037.0	4082.8	3995.8	3736.0	3594.7	3546.2	3498.3	3429.2
50°	3924.2	3952.1	4030.1	4136.6	4278.9	4249.9	3992.2	3837.2	3792.4	3737.6	3673.8
52.5°	3856.7	3888.3	3988.5	4165.6	4392.2	4440.2	4253.1	4087.6	4045.4	3980.0	3916.3
55°	3679.6	3698.6	3848.8	4099.7	4419.1	4573.0	4508.7	4354.3	4312.1	4220.9	4151.3
57.5°	3351.2	3378.6	3597.4	3922.1	4351.6	4663.1	4733.2	4634.7	4594.1	4462.8	4390.1
60°	2922.7	2966.4	3216.8	3623.7	4179.8	4662.6	4937.2	4910.3	4876.6	4701.1	4625.2
62.5°	2437.8	2488.4	2729.3	3202.1	3879.4	4530.3	5064.8	5141.2	5123.8	4920.9	4823.9
65°	1872.2	1907.0	2146.8	2656.5	3411.8	4246.2	5079.5	5298.8	5302.0	5088.0	4927.7
67.5°	1246.6	1346.7	1554.9	1993.4	2785.7	3781.9	4949.9	5324.6	5355.2	5145.4	4875.6
70°	608.3	740.0	944.0	1295.6	1993.4	3069.8	4611.0	5112.7	5180.7	4977.8	4564.6
72.5°	252.5	295.2	406.4	639.4	1144.3	2071.5	3930.0	4538.2	4664.2	4410.7	3837.7
75°	170.2	184.5	232.4	327.8	521.3	1021.5	2834.1	3383.9	3586.8	3331.2	2722.9
77.5°	131.2	140.2	169.2	229.3	309.9	386.4	1517.0	2039.3	2144.2	1985.0	1416.8
80°	103.3	110.2	126.5	167.1	219.8	206.6	517.1	924.0	984.6	825.9	455.4
82.5°	89.6	92.2	90.7	113.3	146.0	120.7	169.7	341.0	376.3	273.0	148.6
85°	64.8	72.2	75.4	70.1	77.5	61.1	69.6	120.7	132.8	118.6	83.8
87.5°	26.4	39.0	48.0	45.3	28.5	17.4	21.6	35.3	40.6	44.3	27.4
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°	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7	1112.7
2.5°	1113.7	1117.4	1120.1	1123.2	1125.3	1128.5	1134.8	1138.5	1139.0	1141.7	1141.1
5°	1123.8	1129.0	1134.8	1143.3	1152.7	1160.6	1172.8	1181.2	1184.4	1187.0	1186.5
7.5°	1145.4	1152.7	1163.3	1178.0	1191.7	1202.3	1217.0	1227.1	1237.1	1240.8	1241.3
10°	1177.5	1188.1	1203.3	1223.4	1238.1	1251.8	1267.1	1275.6	1285.6	1289.8	1291.9
12.5°	1217.6	1228.6	1248.7	1276.6	1290.3	1299.8	1305.1	1303.0	1305.1	1308.8	1309.8
15°	1263.4	1275.6	1298.2	1328.3	1337.7	1329.3	1317.7	1307.2	1305.6	1306.6	1310.3
17.5°	1317.7	1326.7	1353.0	1378.3	1371.5	1336.7	1311.4	1294.5	1286.1	1283.5	1287.1
20°	1393.6	1393.6	1415.2	1431.0	1385.2	1326.2	1286.6	1259.2	1241.8	1234.4	1232.9
22.5°	1485.9	1477.4	1491.1	1480.1	1382.6	1296.6	1241.8	1194.4	1168.0	1157.5	1155.9
25°	1602.9	1592.9	1589.2	1520.6	1363.6	1249.7	1160.6	1103.2	1080.0	1074.2	1075.3
27.5°	1779.4	1754.1	1706.2	1542.8	1328.8	1175.9	1065.8	1012.5	999.4	999.9	1001.5
30°	2014.5	1963.9	1846.4	1546.5	1271.9	1071.6	968.8	930.8	924.5	927.1	936.1
32.5°	2232.2	2184.2	1989.8	1529.6	1184.4	969.3	881.8	856.5	847.0	850.2	854.4
35°	2403.0	2389.8	2122.6	1505.9	1076.8	873.4	803.8	782.2	763.7	759.5	762.7
37.5°	2564.3	2559.0	2222.2	1472.7	970.4	805.4	741.1	712.6	685.7	671.0	671.5
40°	2741.4	2736.1	2287.6	1421.6	876.0	746.4	684.7	647.3	614.1	587.2	589.8
42.5°	2940.6	2909.5	2318.7	1348.3	795.9	696.3	638.8	588.2	544.5	519.7	521.3
45°	3158.3	3088.2	2318.1	1255.0	728.4	650.4	589.8	518.1	477.5	454.3	453.3
47.5°	3389.2	3259.0	2289.7	1151.7	663.1	599.8	513.9	459.1	432.2	418.0	414.8
50°	3627.4	3418.7	2241.2	1033.1	596.1	542.4	466.5	429.0	408.5	395.3	390.6
52.5°	3851.4	3563.6	2182.7	898.7	528.1	486.5	445.4	416.4	394.8	380.0	373.7
55°	4059.6	3688.6	2099.9	761.1	472.8	449.1	435.4	411.1	386.4	369.0	362.1
57.5°	4244.6	3769.7	1957.1	632.0	433.3	423.3	424.8	402.2	373.7	358.9	349.5
60°	4398.5	3829.3	1745.7	512.3	401.1	398.0	408.5	385.3	352.1	335.2	327.8
62.5°	4490.8	3828.2	1486.4	419.6	373.7	374.8	386.9	364.2	330.5	314.7	309.9
65°	4482.9	3734.4	1201.8	358.9	347.4	348.4	364.2	341.0	312.6	303.1	302.5
67.5°	4324.2	3505.7	921.9	319.4	318.4	323.1	341.6	325.2	301.5	300.4	302.0
70°	3894.6	3030.8	664.1	287.8	288.3	295.2	319.4	315.2	295.7	297.8	297.3
72.5°	3123.0	2310.8	445.9	254.6	255.1	266.2	298.3	307.3	289.9	317.8	322.1
75°	2079.9	1441.1	286.7	219.3	219.8	234.0	279.9	292.0	274.1	316.8	319.4
77.5°	999.4	647.8	207.7	184.5	184.5	197.7	241.9	261.4	233.5	246.1	225.6
80°	345.2	243.5	163.4	148.6	145.5	154.4	204.0	226.6	201.3	185.5	173.9
82.5°	136.0	126.5	131.2	115.4	104.9	110.7	158.7	187.1	148.1	133.9	133.4
85°	78.0	82.2	92.8	76.4	60.6	68.0	116.5	134.4	111.7	98.6	100.7
87.5°	21.1	29.0	42.7	39.5	27.4	29.0	55.3	74.3	64.3	49.5	51.1
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)