

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: P960790

Luminaire Tested: **NAV-SB1D-722-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960790
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8540.3 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

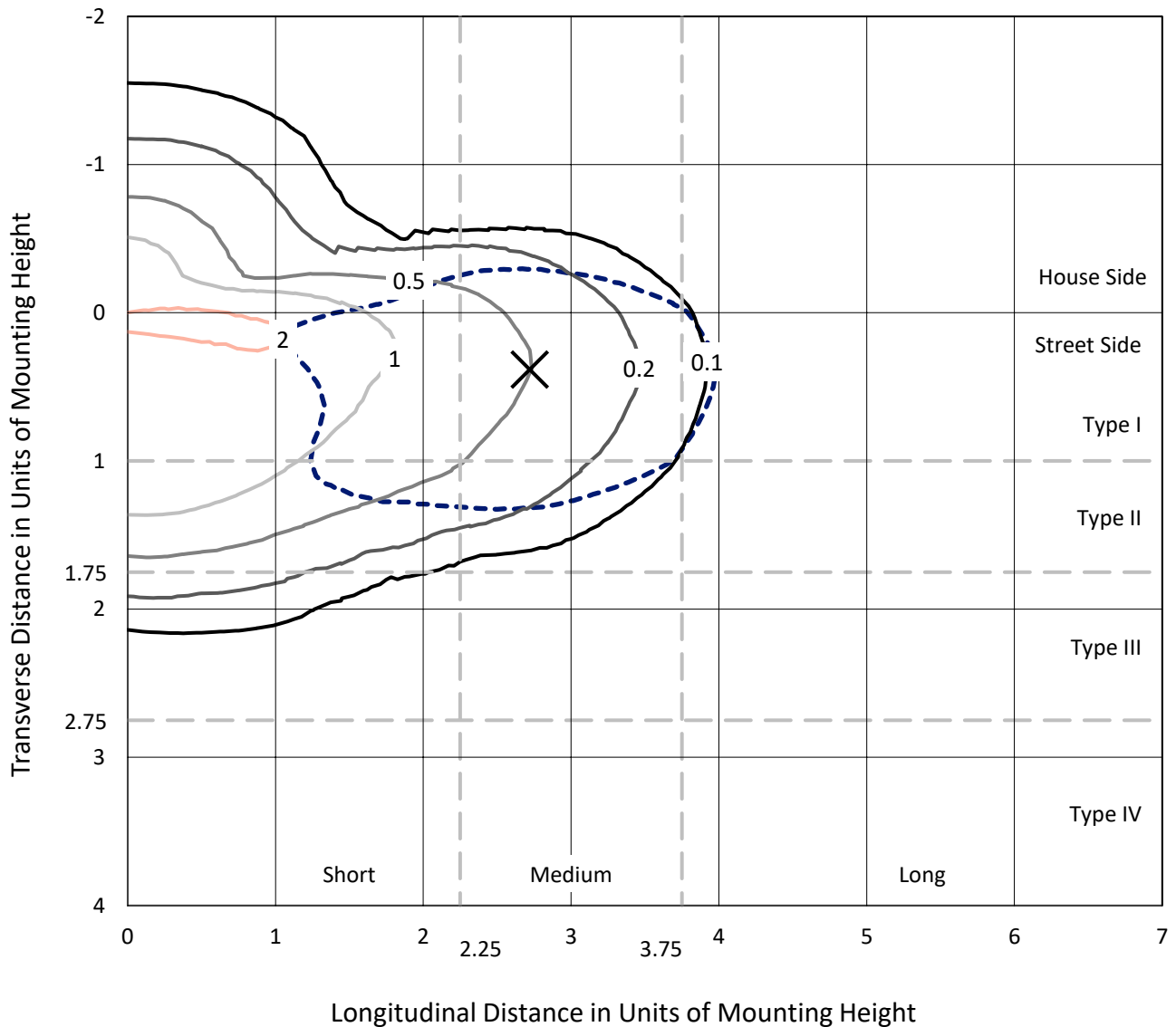
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

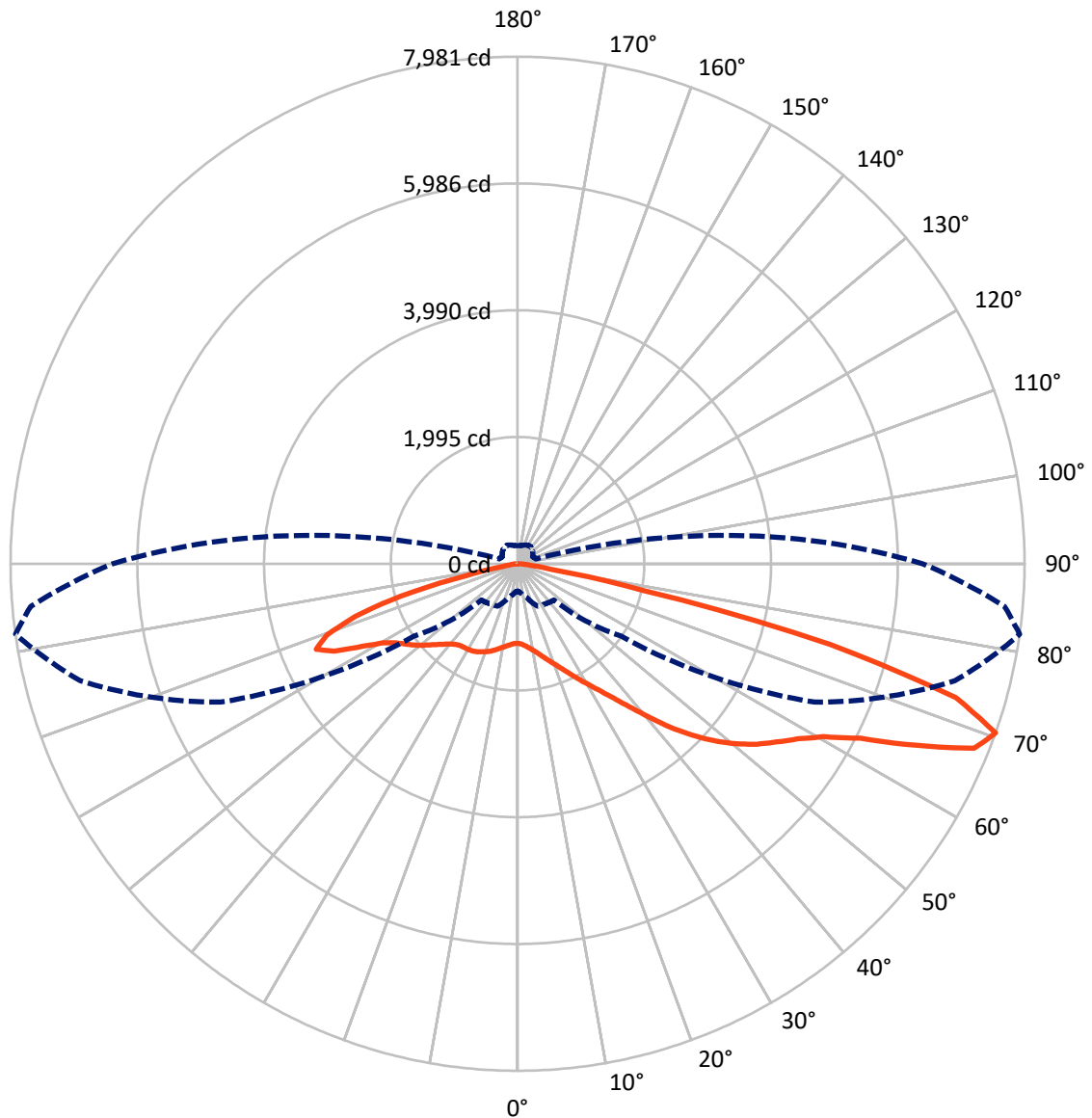
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2105.4	0.0	2105.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	6434.9	0.0	6434.9
	% Fixture	75.3	0.0	75.3
Total	Lumens	8540.3	0.0	8540.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	1.4
10°-20°	339.7	4.0
20°-30°	568.2	6.7
30°-40°	887.7	10.4
40°-50°	1413.8	16.6
50°-60°	1967.4	23.0
60°-70°	2058.0	24.1
70°-80°	1075.6	12.6
80°-90°	111.7	1.3
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°	8540.3	100.0
0°-180°	8540.3	100.0

Coefficient of Utilization

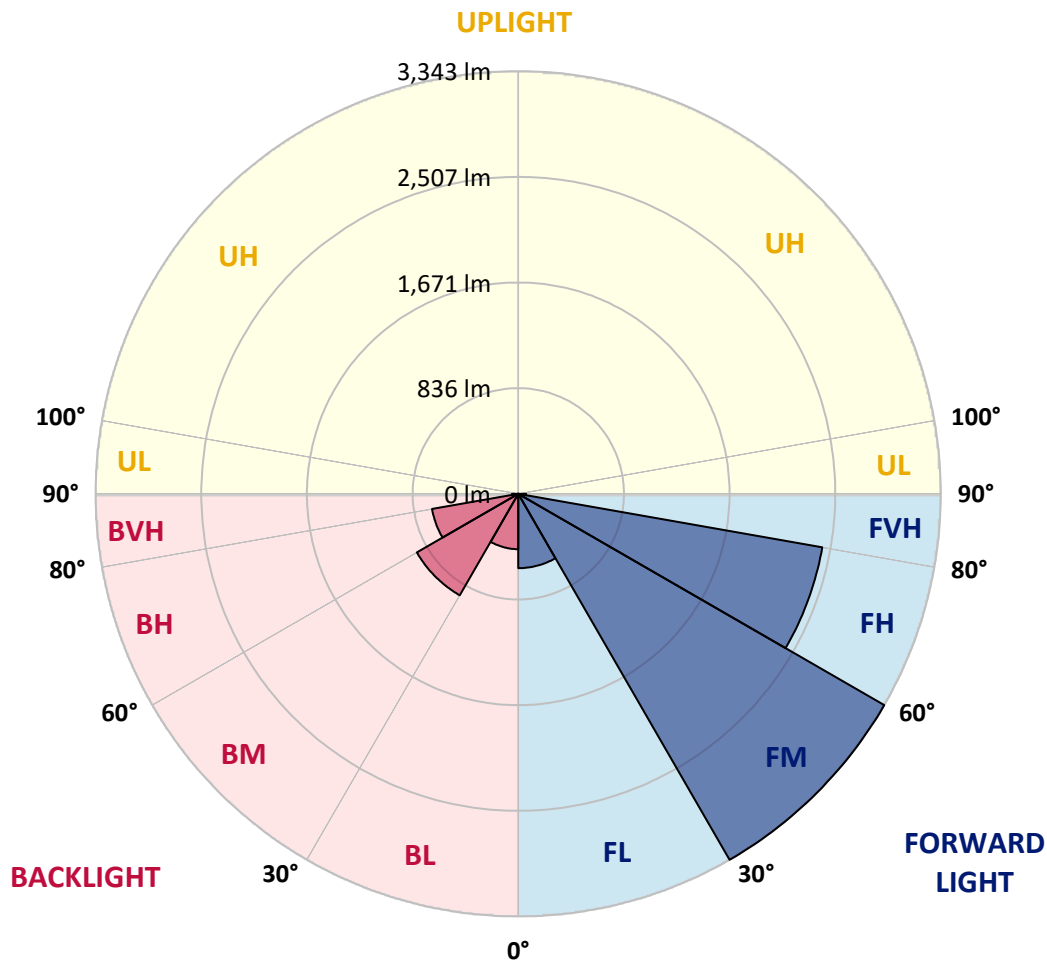


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	588.1	6.9			
FM (30°-60°)	3342.6	39.1			
FH (60°-80°)	2441.7	28.6			G2/5000
FVH (80°-90°)	62.5	0.7			G1/100
BL (0°-30°)	438.0	5.1	B1/500		
BM (30°-60°)	926.3	10.8	B1/1000		
BH (60°-80°)	691.9	8.1	B2/1000		G2/1000
BVH (80°-90°)	49.2	0.6			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1
2.5°	1282.1	1289.2	1287.0	1284.7	1284.7	1281.6	1281.1	1276.5	1272.9	1267.1	1265.7
5°	1298.4	1306.1	1305.1	1307.0	1312.8	1314.2	1315.6	1312.8	1305.5	1298.4	1295.2
7.5°	1283.8	1292.4	1295.2	1306.1	1324.2	1340.5	1352.7	1357.7	1350.9	1340.5	1335.5
10°	1234.9	1244.5	1253.9	1279.7	1311.9	1350.4	1383.0	1402.6	1401.2	1391.2	1382.6
12.5°	1135.7	1145.6	1166.0	1216.3	1275.2	1343.2	1403.9	1444.7	1458.8	1451.5	1436.5
15°	1056.4	1065.0	1080.4	1132.0	1208.6	1311.9	1411.6	1491.0	1526.7	1522.6	1504.5
17.5°	1054.1	1057.7	1067.2	1091.7	1150.6	1263.0	1403.4	1536.3	1604.6	1604.2	1581.6
20°	1094.0	1095.3	1100.7	1105.8	1139.3	1225.8	1382.6	1573.9	1692.2	1692.2	1667.7
22.5°	1149.2	1148.3	1153.7	1149.2	1165.5	1222.6	1369.5	1607.0	1789.5	1796.8	1766.0
25°	1232.2	1227.6	1226.3	1215.9	1219.0	1252.1	1384.0	1644.6	1905.2	1920.1	1881.6
27.5°	1342.7	1335.5	1330.6	1306.5	1298.4	1312.8	1428.4	1689.9	2033.8	2059.6	2010.7
30°	1486.9	1473.7	1466.5	1424.7	1395.3	1397.6	1495.5	1750.2	2168.4	2210.1	2148.0
32.5°	1683.6	1663.2	1643.7	1575.2	1521.3	1503.7	1582.0	1833.5	2314.3	2381.0	2301.2
35°	1903.7	1887.4	1866.6	1761.1	1678.1	1637.3	1698.9	1950.0	2485.2	2590.8	2487.1
37.5°	2115.9	2101.8	2111.8	1969.5	1862.5	1803.2	1852.1	2106.4	2696.0	2851.9	2719.9
40°	2335.2	2324.3	2325.7	2189.7	2065.1	1998.4	2037.9	2302.6	2937.4	3162.2	3000.0
42.5°	2573.6	2565.4	2538.2	2417.7	2277.7	2215.5	2251.8	2529.2	3196.7	3515.7	3307.3
45°	2840.5	2835.5	2810.1	2671.9	2511.5	2441.7	2490.6	2779.3	3457.2	3848.4	3615.9
47.5°	3071.1	3075.2	3072.0	2955.6	2789.2	2686.8	2745.4	3040.4	3699.7	4161.0	3911.8
50°	3182.2	3203.4	3234.7	3198.5	3095.2	2991.0	3002.2	3292.3	3930.8	4454.2	4195.4
52.5°	3124.2	3164.5	3249.7	3307.7	3347.5	3325.8	3295.5	3542.4	4148.4	4718.9	4463.8
55°	2908.0	2964.6	3106.1	3246.1	3449.5	3607.7	3647.6	3819.8	4360.5	4951.8	4717.6
57.5°	2514.2	2606.2	2733.1	3016.3	3358.9	3744.1	4058.2	4204.5	4585.2	5200.6	4983.0
60°	1839.0	1962.3	2119.9	2541.4	3041.7	3671.1	4407.6	4795.5	4904.7	5522.8	5328.9
62.5°	1176.9	1253.1	1398.0	1795.0	2370.1	3297.3	4514.5	5534.2	5446.2	6051.2	5847.3
65°	805.8	854.6	987.5	1210.4	1532.2	2454.4	4228.1	6087.9	6306.3	6888.7	6733.6
67.5°	585.5	622.7	735.9	931.3	998.4	1452.4	3280.9	6062.6	7142.4	7751.5	7510.4
70°	426.9	453.2	548.4	735.9	768.1	808.0	1987.6	5153.5	7124.4	7980.9	7692.1
72.5°	316.3	334.5	398.3	571.0	621.8	545.6	983.8	3745.5	6121.9	7218.6	6987.0
75°	228.9	242.4	289.6	436.9	497.5	415.5	490.8	2188.8	4270.3	5077.7	5118.5
77.5°	175.0	185.3	216.2	319.9	398.3	311.8	304.5	1007.0	2024.8	2034.7	2148.9
80°	140.5	147.3	164.0	225.2	305.4	233.4	198.4	406.5	639.9	541.5	568.3
82.5°	103.3	114.7	138.7	158.2	218.4	160.9	121.0	205.3	243.3	209.4	211.2
85°	58.9	66.6	83.8	113.3	139.6	98.3	69.3	91.1	113.3	92.9	82.9
87.5°	20.8	27.2	29.4	44.4	60.7	40.8	26.8	26.2	37.2	27.7	23.1
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°	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1	1252.1
2.5°	1261.2	1258.9	1249.9	1237.6	1224.9	1212.7	1208.6	1200.0	1194.1	1190.9	1194.5
5°	1286.6	1279.3	1258.0	1230.8	1202.2	1171.5	1149.7	1129.8	1115.3	1101.7	1107.1
7.5°	1322.8	1310.2	1273.5	1225.8	1175.1	1123.9	1085.8	1056.8	1037.3	1024.6	1027.4
10°	1365.0	1345.5	1289.2	1218.1	1139.7	1066.3	1021.4	996.5	984.3	977.5	979.3
12.5°	1413.5	1385.8	1305.5	1200.5	1085.8	1001.9	971.2	963.9	964.3	964.8	965.8
15°	1473.2	1434.7	1318.8	1161.9	1015.6	952.5	947.1	958.9	971.2	977.0	976.6
17.5°	1540.8	1486.5	1321.0	1098.5	946.7	920.9	938.1	963.4	982.1	990.1	992.0
20°	1613.2	1538.9	1304.7	1008.8	890.0	895.0	925.8	958.5	978.9	989.2	992.0
22.5°	1696.3	1595.2	1265.7	914.5	843.8	866.9	903.1	934.9	956.2	966.6	969.3
25°	1791.0	1658.1	1204.6	835.2	803.9	835.2	871.5	897.7	914.9	924.4	927.2
27.5°	1896.0	1723.8	1123.0	772.2	769.1	802.6	832.5	852.9	861.9	869.2	871.9
30°	2001.6	1783.7	1024.2	724.6	738.7	770.4	791.7	800.7	803.5	804.8	808.0
32.5°	2115.9	1835.4	920.3	685.2	709.7	739.1	751.8	755.9	743.2	734.6	737.3
35°	2254.1	1890.6	818.9	653.9	681.1	706.5	710.5	706.9	692.0	674.3	675.3
37.5°	2424.9	1959.5	737.8	631.7	654.4	671.2	666.1	665.2	666.7	645.8	647.1
40°	2634.2	2049.3	678.4	614.5	632.6	636.2	622.2	629.9	636.7	605.0	605.9
42.5°	2866.7	2157.5	640.8	602.7	614.5	605.9	584.1	592.8	591.8	550.1	549.7
45°	3103.8	2275.4	627.6	594.1	597.8	580.6	556.5	558.7	539.8	502.1	503.5
47.5°	3339.4	2401.8	635.8	586.8	576.9	557.4	538.8	528.9	500.7	472.6	472.6
50°	3570.6	2534.6	665.7	572.4	548.4	537.0	523.4	505.7	475.8	451.8	450.0
52.5°	3784.9	2668.3	699.3	548.4	512.5	519.4	510.8	490.4	460.8	436.4	436.9
55°	3987.9	2801.9	712.4	515.3	479.0	503.9	499.0	461.4	426.0	406.0	404.3
57.5°	4209.1	2962.9	697.9	473.1	451.8	486.3	467.2	425.5	405.2	390.2	388.8
60°	4515.4	3215.2	666.7	421.0	426.0	460.0	427.3	410.1	388.0	371.2	370.2
62.5°	5024.3	3686.1	616.3	369.3	395.6	421.0	408.3	391.0	368.4	352.1	352.1
65°	5776.6	4340.5	521.6	329.0	361.6	382.9	388.0	370.7	347.2	329.9	330.8
67.5°	6411.1	4751.1	394.7	295.5	326.8	352.1	366.1	349.4	324.5	307.7	308.1
70°	6376.1	4452.9	301.3	262.4	295.9	321.7	339.9	326.8	300.0	284.1	285.5
72.5°	5663.3	3725.1	243.8	228.9	264.7	290.1	311.8	301.9	274.6	259.2	259.2
75°	4160.6	2644.3	194.9	194.9	225.7	257.0	281.0	274.6	249.7	238.8	235.6
77.5°	1753.8	1109.4	152.7	161.7	187.6	220.7	250.6	252.9	231.1	244.7	222.0
80°	466.3	305.9	116.4	127.3	147.3	182.1	218.0	217.1	193.5	180.8	168.1
82.5°	177.6	120.5	82.9	89.7	106.5	139.6	172.6	178.1	154.6	133.7	133.7
85°	68.5	51.7	51.2	53.9	62.1	92.5	130.5	135.1	116.4	98.8	102.0
87.5°	17.6	15.4	19.1	18.1	28.6	49.4	74.7	77.5	71.1	41.2	58.9
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)