

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: P881957

Luminaire Tested: **NAV-SB1C-835-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881957  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-835-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

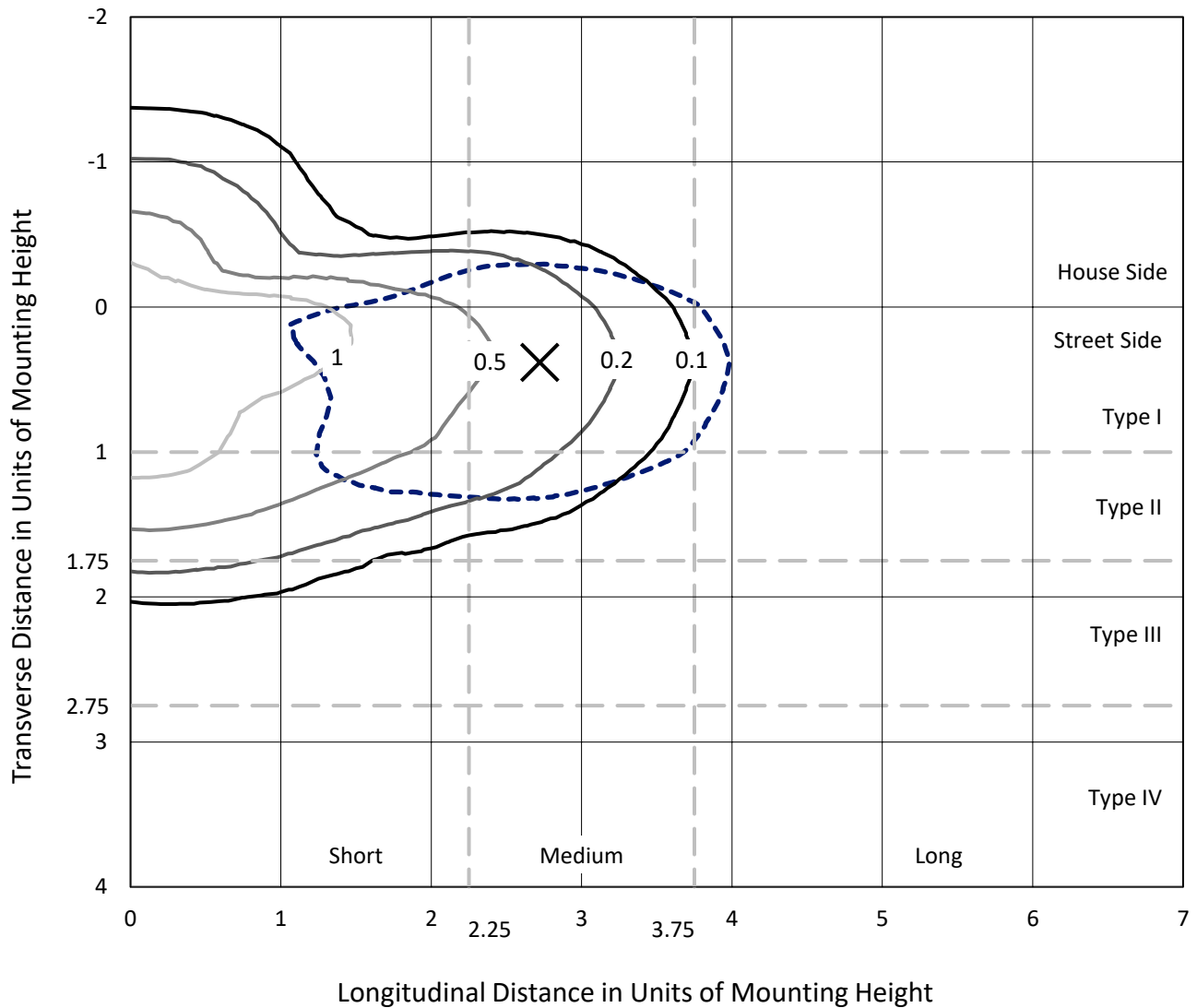
Lumens per Lamp: N/A  
Luminaire Lumens: 6266 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
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

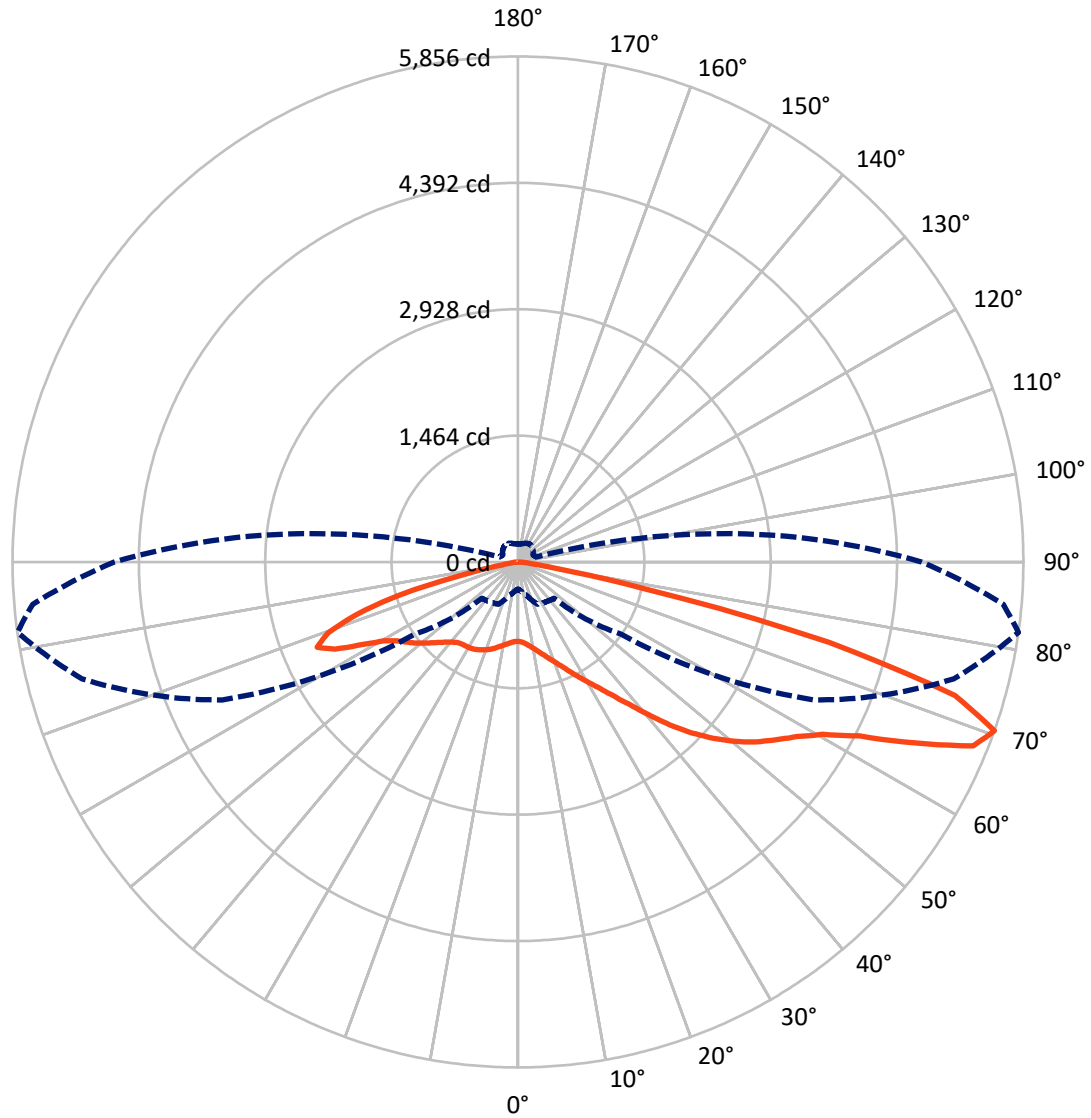
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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
<b>House Side</b>	Lumens	1544.7	0.0	1544.7
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	4721.3	0.0	4721.3
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	6266.0	0.0	6266.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.7	1.4
10°-20°	249.2	4.0
20°-30°	416.9	6.7
30°-40°	651.3	10.4
40°-50°	1037.3	16.6
50°-60°	1443.5	23.0
60°-70°	1510.0	24.1
70°-80°	789.2	12.6
80°-90°	81.9	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°	6266.0	100.0
0°-180°	6266.0	100.0

**Coefficient of Utilization**



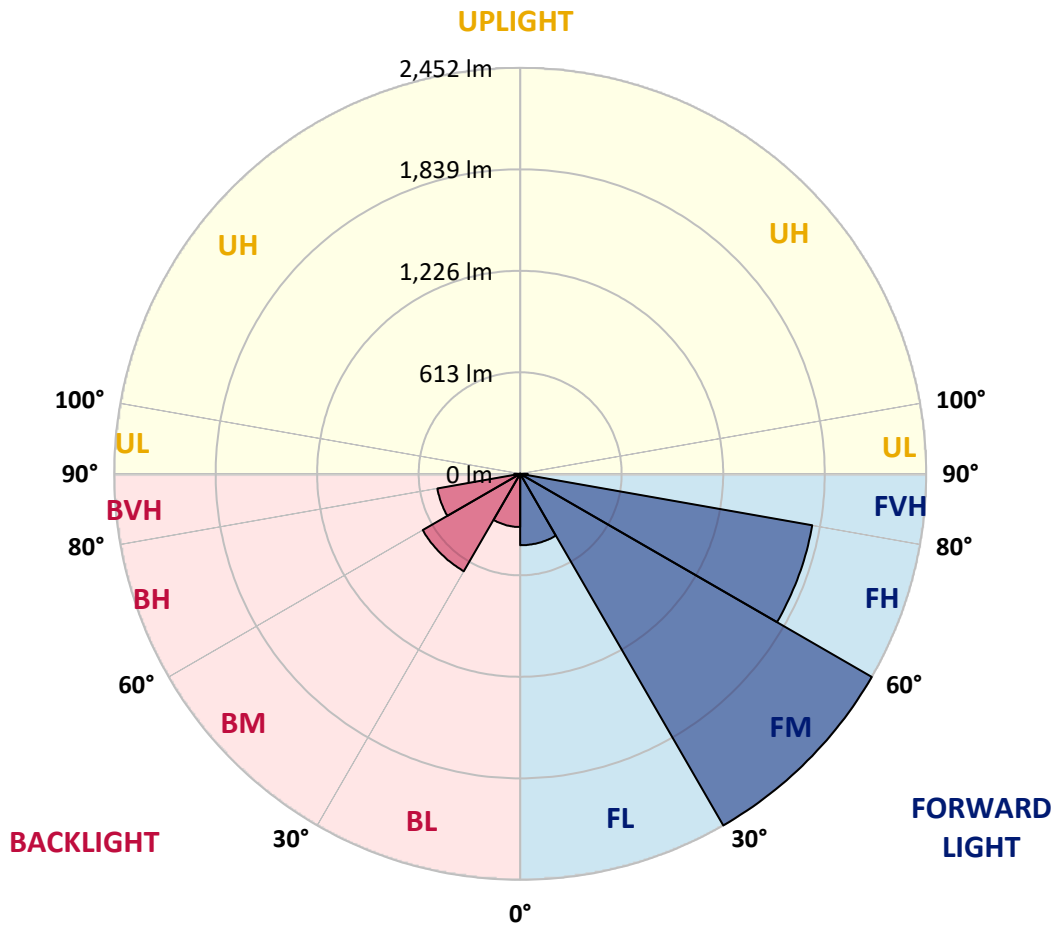
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	431.5	6.9			
FM (30°-60°)	2452.5	39.1			
FH (60°-80°)	1791.5	28.6			G1/1800
FVH (80°-90°)	45.9	0.7			G1/100
BL (0°-30°)	321.4	5.1	B1/500		
BM (30°-60°)	679.6	10.8	B1/1000		
BH (60°-80°)	507.7	8.1	B2/1000		G2/1000
BVH (80°-90°)	36.1	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°	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7
2.5°	940.6	945.9	944.3	942.6	942.6	940.3	940.0	936.6	934.0	929.6	928.6
5°	952.6	958.2	957.6	958.9	963.2	964.2	965.2	963.2	957.9	952.6	950.3
7.5°	941.9	948.3	950.3	958.2	971.5	983.5	992.5	996.1	991.2	983.5	979.9
10°	906.0	913.0	920.0	939.0	962.6	990.8	1014.8	1029.1	1028.1	1020.7	1014.4
12.5°	833.2	840.5	855.5	892.4	935.6	985.5	1030.1	1060.0	1070.3	1065.0	1054.0
15°	775.0	781.4	792.7	830.6	886.8	962.6	1035.7	1093.9	1120.2	1117.2	1103.9
17.5°	773.4	776.0	783.0	801.0	844.2	926.7	1029.7	1127.1	1177.4	1177.0	1160.4
20°	802.6	803.6	807.6	811.3	835.9	899.4	1014.4	1154.7	1241.5	1241.5	1223.6
22.5°	843.2	842.5	846.5	843.2	855.2	897.1	1004.8	1179.0	1313.0	1318.3	1295.7
25°	904.0	900.7	899.7	892.1	894.4	918.7	1015.4	1206.6	1397.8	1408.8	1380.5
27.5°	985.2	979.9	976.2	958.6	952.6	963.2	1048.0	1239.9	1492.2	1511.2	1475.3
30°	1090.9	1081.3	1075.9	1045.4	1023.7	1025.4	1097.2	1284.1	1591.0	1621.6	1576.0
32.5°	1235.2	1220.2	1205.9	1155.7	1116.2	1103.2	1160.7	1345.3	1698.0	1746.9	1688.4
35°	1396.8	1384.8	1369.5	1292.1	1231.2	1201.3	1246.5	1430.7	1823.4	1900.9	1824.7
37.5°	1552.4	1542.1	1549.4	1445.0	1366.5	1323.0	1358.9	1545.4	1978.0	2092.4	1995.6
40°	1713.3	1705.3	1706.3	1606.6	1515.2	1466.3	1495.2	1689.4	2155.2	2320.1	2201.1
42.5°	1888.2	1882.2	1862.3	1773.8	1671.1	1625.6	1652.2	1855.6	2345.4	2579.5	2426.5
45°	2084.1	2080.4	2061.8	1960.4	1842.7	1791.5	1827.4	2039.2	2536.6	2823.5	2652.9
47.5°	2253.3	2256.3	2254.0	2168.5	2046.5	1971.3	2014.2	2230.7	2714.5	3052.9	2870.1
50°	2334.8	2350.4	2373.3	2346.7	2270.9	2194.4	2202.8	2415.6	2884.0	3268.1	3078.2
52.5°	2292.2	2321.8	2384.3	2426.9	2456.1	2440.2	2417.9	2599.1	3043.6	3462.2	3275.0
55°	2133.6	2175.2	2278.9	2381.6	2530.9	2647.0	2676.2	2802.6	3199.2	3633.1	3461.2
57.5°	1844.7	1912.2	2005.3	2213.1	2464.4	2747.0	2977.5	3084.9	3364.1	3815.7	3656.1
60°	1349.3	1439.7	1555.4	1864.6	2231.7	2693.5	3233.8	3518.4	3598.6	4052.1	3909.8
62.5°	863.5	919.3	1025.7	1317.0	1738.9	2419.2	3312.3	4060.4	3995.9	4439.8	4290.1
65°	591.2	627.1	724.5	888.1	1124.2	1800.8	3102.1	4466.7	4627.0	5054.2	4940.5
67.5°	429.6	456.8	540.0	683.3	732.5	1065.6	2407.2	4448.1	5240.4	5687.3	5510.4
70°	313.2	332.5	402.3	540.0	563.6	592.8	1458.3	3781.1	5227.1	5855.5	5643.7
72.5°	232.1	245.4	292.3	418.9	456.2	400.3	721.8	2748.0	4491.6	5296.3	5126.4
75°	167.9	177.9	212.5	320.5	365.1	304.9	360.1	1605.9	3133.1	3725.6	3755.5
77.5°	128.3	136.0	158.6	234.7	292.3	228.8	223.4	738.8	1485.6	1492.9	1576.7
80°	103.1	108.1	120.4	165.2	224.1	171.2	145.6	298.2	469.5	397.3	416.9
82.5°	75.8	84.1	101.7	116.0	160.3	118.0	88.8	150.6	178.5	153.6	154.9
85°	43.2	48.9	61.5	83.1	102.4	72.2	50.9	66.8	83.1	68.2	60.8
87.5°	15.3	19.9	21.6	32.6	44.6	29.9	19.6	19.3	27.3	20.3	17.0
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°	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7	918.7
2.5°	925.3	923.7	917.0	908.0	898.7	889.7	886.8	880.4	876.1	873.8	876.4
5°	943.9	938.6	923.0	903.0	882.1	859.5	843.5	828.9	818.3	808.3	812.3
7.5°	970.5	961.2	934.3	899.4	862.2	824.6	796.6	775.4	761.1	751.8	753.8
10°	1001.5	987.2	945.9	893.7	836.2	782.4	749.4	731.1	722.2	717.2	718.5
12.5°	1037.0	1016.8	957.9	880.8	796.6	735.1	712.5	707.2	707.5	707.9	708.5
15°	1080.9	1052.7	967.6	852.5	745.1	698.9	694.9	703.6	712.5	716.9	716.5
17.5°	1130.5	1090.6	969.2	806.0	694.6	675.6	688.3	706.9	720.5	726.5	727.8
20°	1183.7	1129.1	957.2	740.1	653.0	656.7	679.3	703.2	718.2	725.8	727.8
22.5°	1244.5	1170.4	928.6	671.0	619.1	636.1	662.7	685.9	701.6	709.2	711.2
25°	1314.0	1216.6	883.8	612.8	589.8	612.8	639.4	658.7	671.3	678.3	680.3
27.5°	1391.1	1264.8	823.9	566.6	564.2	588.8	610.8	625.7	632.4	637.7	639.7
30°	1468.6	1308.7	751.4	531.7	542.0	565.2	580.9	587.5	589.5	590.5	592.8
32.5°	1552.4	1346.6	675.3	502.7	520.7	542.3	551.6	554.6	545.3	539.0	541.0
35°	1653.8	1387.2	600.8	479.8	499.7	518.4	521.3	518.7	507.7	494.7	495.4
37.5°	1779.2	1437.7	541.3	463.5	480.1	492.4	488.8	488.1	489.1	473.8	474.8
40°	1932.8	1503.5	497.7	450.9	464.2	466.8	456.5	462.2	467.2	443.9	444.5
42.5°	2103.3	1583.0	470.1	442.2	450.9	444.5	428.6	434.9	434.2	403.6	403.3
45°	2277.2	1669.4	460.5	435.9	438.6	425.9	408.3	410.0	396.0	368.4	369.4
47.5°	2450.1	1762.2	466.5	430.6	423.3	409.0	395.3	388.0	367.4	346.8	346.8
50°	2619.7	1859.6	488.4	419.9	402.3	394.0	384.0	371.1	349.1	331.5	330.2
52.5°	2777.0	1957.7	513.0	402.3	376.0	381.0	374.7	359.8	338.1	320.2	320.5
55°	2925.9	2055.8	522.7	378.0	351.4	369.7	366.1	338.5	312.5	297.9	296.6
57.5°	3088.2	2173.8	512.0	347.1	331.5	356.8	342.8	312.2	297.2	286.3	285.3
60°	3312.9	2359.0	489.1	308.9	312.5	337.5	313.5	300.9	284.6	272.3	271.6
62.5°	3686.3	2704.5	452.2	271.0	290.3	308.9	299.6	286.9	270.3	258.3	258.3
65°	4238.3	3184.6	382.7	241.4	265.3	281.0	284.6	272.0	254.7	242.1	242.7
67.5°	4703.8	3485.8	289.6	216.8	239.7	258.3	268.7	256.4	238.1	225.8	226.1
70°	4678.2	3267.1	221.1	192.5	217.1	236.1	249.4	239.7	220.1	208.5	209.5
72.5°	4155.1	2733.1	178.9	167.9	194.2	212.8	228.8	221.4	201.5	190.2	190.2
75°	3052.6	1940.1	143.0	143.0	165.6	188.5	206.1	201.5	183.2	175.2	172.9
77.5°	1286.7	813.9	112.0	118.7	137.7	161.9	183.9	185.5	169.6	179.5	162.9
80°	342.1	224.4	85.5	93.4	108.1	133.7	159.9	159.3	142.0	132.7	123.4
82.5°	130.3	88.4	60.8	65.8	78.1	102.4	126.7	130.7	113.4	98.1	98.1
85°	50.2	37.9	37.6	39.6	45.6	67.8	95.8	99.1	85.5	72.5	74.8
87.5°	13.0	11.3	14.0	13.3	20.9	36.2	54.9	56.9	52.2	30.3	43.2
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)