

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: McGRAW-EDISON

Report Number: P833690

Luminaire Tested: **TTN-D2-830-U-RW-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833690
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D2-830-U-RW-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5153.8 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

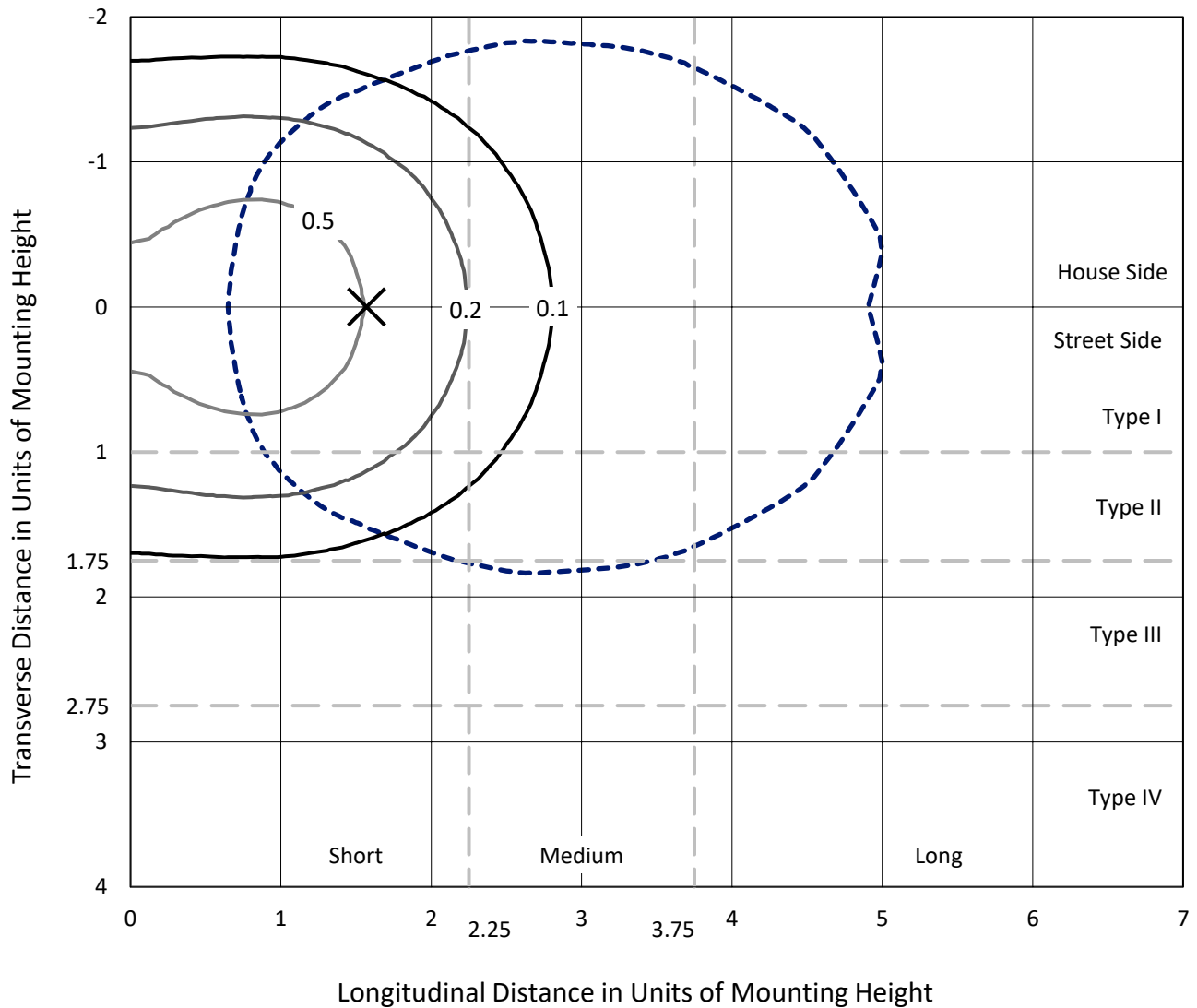
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

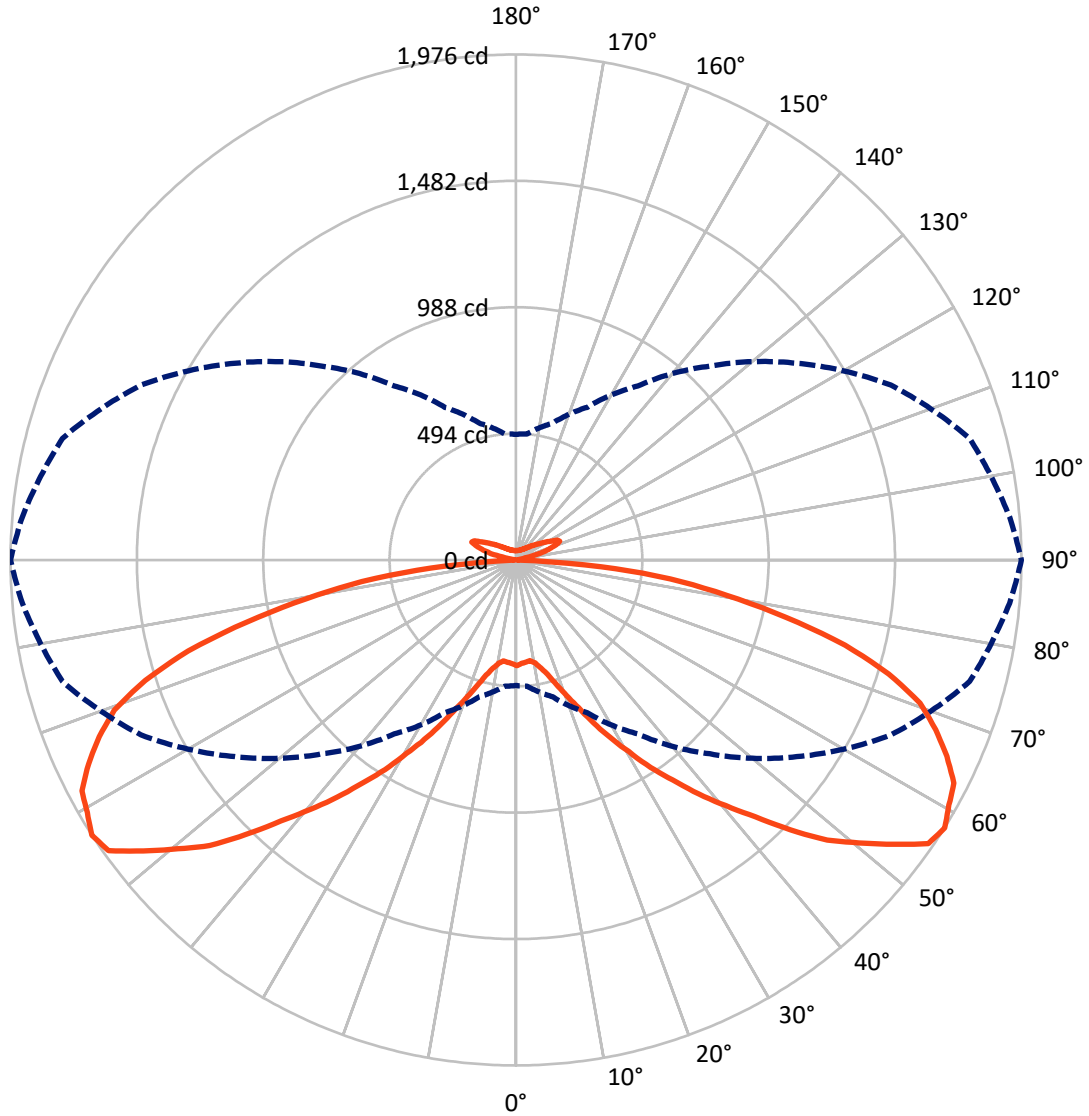
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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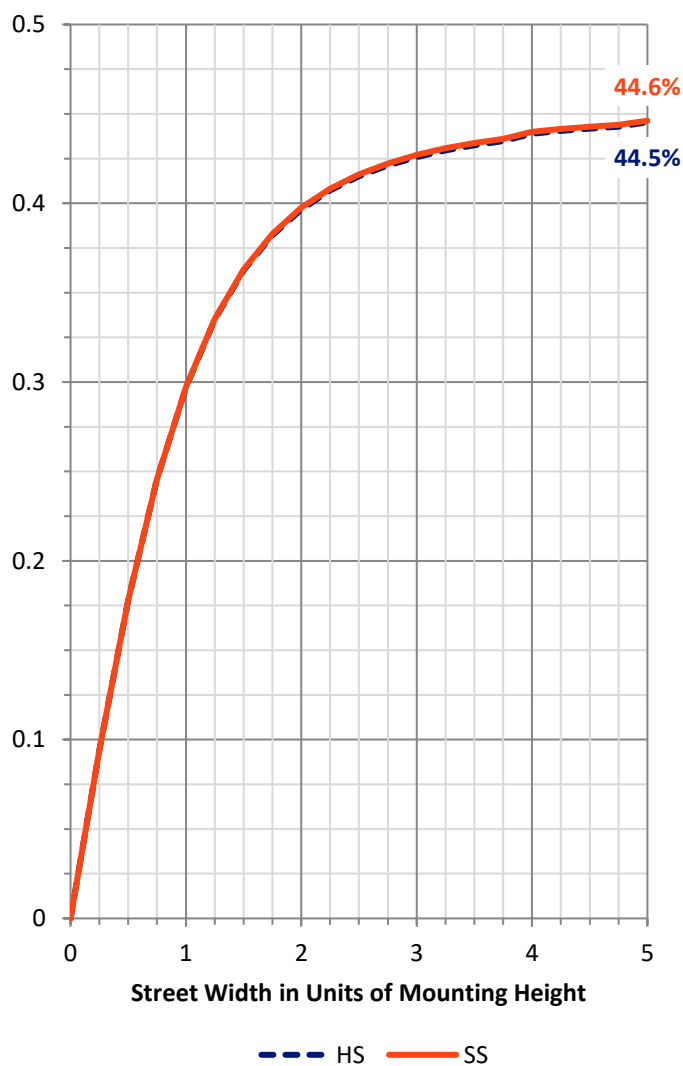
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2309.9	267.0	2576.9
	% Fixture	44.8	5.2	50.0
Street Side	Lumens	2309.9	267.0	2576.9
	% Fixture	44.8	5.2	50.0
Total	Lumens	4619.7	534.0	5153.8
	% Fixture	89.6	10.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.8
10°-20°	123.9	2.4
20°-30°	258.4	5.0
30°-40°	463.5	9.0
40°-50°	740.6	14.4
50°-60°	1013.9	19.7
60°-70°	1045.8	20.3
70°-80°	743.8	14.4
80°-90°	191.1	3.7
90°-100°	11.9	0.2
100°-110°	121.1	2.4
110°-120°	177.1	3.4
120°-130°	102.8	2.0
130°-140°	54.4	1.1
140°-150°	32.3	0.6
150°-160°	19.9	0.4
160°-170°	10.9	0.2
170°-180°	3.5	0.1
0°-90°	4619.7	89.6
0°-180°	5153.8	100.0

Coefficient of Utilization



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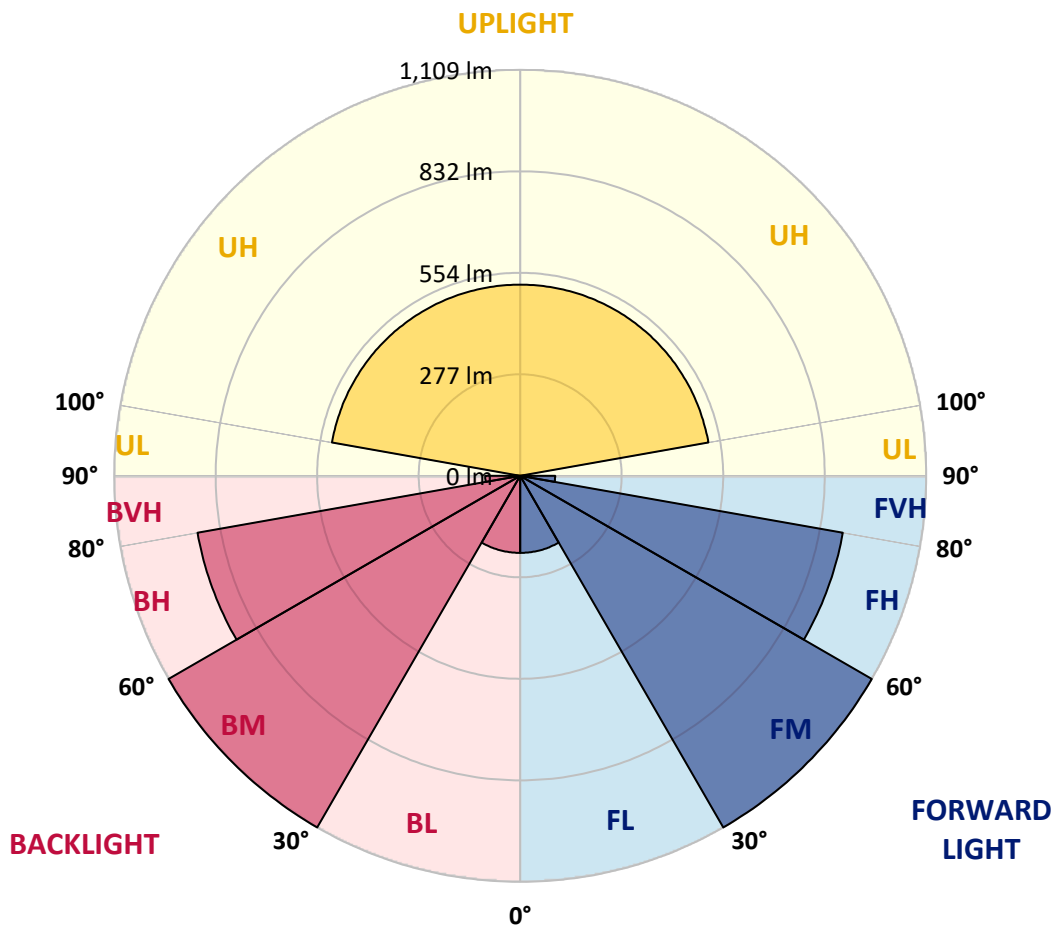
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	210.5	4.1			
FM (30°-60°)	1109.0	21.5			
FH (60°-80°)	894.8	17.4			G1/1800
FVH (80°-90°)	95.5	1.9			G1/100
BL (0°-30°)	210.5	4.1	B1/500		
BM (30°-60°)	1109.0	21.5	B2/2500		
BH (60°-80°)	894.8	17.4	B2/1000		G2/1000
BVH (80°-90°)	95.5	1.9			G1/100
UL (90°-100°)	11.9	0.2		U2/50	
UH (100°-180°)	522.1	10.1		U4/1000	

BUG Rating: B2-U4-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2	413.2
2.5°	413.2	413.2	409.3	409.3	409.3	405.4	405.4	405.4	405.4	401.5	405.4
5°	413.2	413.2	413.2	413.2	409.3	405.4	405.4	405.4	401.5	401.5	401.5
7.5°	409.3	409.3	409.3	409.3	405.4	401.5	401.5	401.5	397.6	397.6	397.6
10°	405.4	409.3	405.4	405.4	401.5	401.5	405.4	405.4	409.3	409.3	409.3
12.5°	401.5	401.5	401.5	405.4	405.4	409.3	417.1	424.9	428.8	432.7	432.7
15°	401.5	401.5	405.4	409.3	417.1	424.9	436.6	448.3	456.1	463.9	463.9
17.5°	401.5	401.5	405.4	417.1	428.8	444.4	463.9	479.5	495.0	506.7	510.6
20°	401.5	401.5	409.3	424.9	448.3	471.7	498.9	522.3	545.7	565.2	565.2
22.5°	405.4	409.3	417.1	436.6	471.7	506.7	541.8	576.9	604.2	627.6	627.6
25°	413.2	413.2	424.9	456.1	498.9	545.7	596.4	639.3	674.4	705.5	705.5
27.5°	417.1	421.0	436.6	475.6	530.1	588.6	658.8	709.4	756.2	783.5	787.4
30°	424.9	428.8	452.2	491.1	557.4	631.5	713.3	783.5	834.2	861.5	869.3
32.5°	428.8	432.7	463.9	510.6	584.7	670.5	764.0	853.7	923.8	955.0	966.7
35°	440.5	444.4	475.6	530.1	615.9	713.3	822.5	927.7	1009.6	1048.6	1056.4
37.5°	452.2	456.1	487.2	549.6	647.1	760.1	884.8	1005.7	1099.2	1146.0	1161.6
40°	460.0	463.9	498.9	573.0	682.1	810.8	955.0	1087.5	1192.8	1251.3	1263.0
42.5°	471.7	475.6	514.5	592.5	713.3	861.5	1029.1	1177.2	1290.2	1356.5	1372.1
45°	483.4	487.2	530.1	615.9	748.4	916.0	1103.1	1282.4	1411.1	1489.0	1504.6
47.5°	495.0	498.9	545.7	639.3	783.5	970.6	1181.1	1376.0	1531.9	1606.0	1637.2
50°	498.9	506.7	553.5	654.9	806.9	1017.4	1247.4	1469.5	1633.3	1730.7	1738.5
52.5°	502.8	510.6	561.3	666.6	826.4	1052.5	1301.9	1547.5	1738.5	1855.4	1847.7
55°	506.7	506.7	561.3	666.6	834.2	1075.8	1340.9	1598.2	1808.7	1902.2	1956.8
57.5°	491.1	495.0	553.5	658.8	830.3	1071.9	1340.9	1617.7	1836.0	1937.3	1976.3
60°	471.7	479.5	534.0	639.3	814.7	1060.3	1333.1	1609.9	1847.7	1956.8	1945.1
62.5°	444.4	460.0	506.7	612.0	791.3	1033.0	1321.4	1590.4	1820.4	1933.4	1921.7
65°	413.2	428.8	471.7	584.7	740.6	966.7	1259.1	1551.4	1746.3	1874.9	1851.5
67.5°	382.0	393.7	436.6	537.9	682.1	896.5	1177.2	1465.6	1641.1	1781.4	1769.7
70°	346.9	350.8	393.7	483.4	623.7	826.4	1099.2	1344.8	1547.5	1652.8	1676.1
72.5°	304.0	304.0	346.9	424.9	553.5	732.8	994.0	1208.4	1399.4	1489.0	1524.1
75°	249.5	253.4	288.5	358.6	463.9	627.6	845.9	1064.2	1224.0	1317.5	1329.2
77.5°	194.9	198.8	226.1	284.6	374.2	506.7	697.7	869.3	1021.3	1103.1	1079.7
80°	140.3	144.2	163.7	206.6	276.8	378.1	537.9	689.9	799.1	865.4	834.2
82.5°	85.8	89.7	101.3	128.6	175.4	245.6	366.4	479.5	565.2	619.8	608.1
85°	42.9	42.9	50.7	58.5	74.1	109.1	175.4	241.7	307.9	346.9	335.2
87.5°	7.8	11.7	11.7	11.7	11.7	7.8	11.7	11.7	11.7	19.5	7.8
90°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	4.6	6.4	7.3	6.4	7.3	5.5	5.5	4.6	4.6
95°	5.5	5.5	6.4	8.2	10.1	11.0	11.0	6.4	6.4	5.5	5.5
97.5°	7.3	8.2	8.2	10.1	16.4	30.2	18.3	9.1	9.1	8.2	7.3
100°	11.9	12.8	12.8	22.8	48.4	64.9	46.6	23.8	17.4	12.8	12.8
102.5°	38.4	40.2	49.3	74.0	109.6	99.6	84.1	79.5	54.8	43.9	42.0
105°	97.8	96.8	104.2	123.3	153.5	150.8	138.9	126.1	108.7	100.5	100.5
107.5°	128.8	128.8	135.2	151.7	174.5	203.7	206.5	163.5	143.4	134.3	133.4
110°	145.3	145.3	150.8	164.5	194.6	235.7	233.9	201.9	177.3	165.4	163.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	148.9	149.8	157.1	178.2	211.1	229.3	221.1	208.3	197.4	188.2	186.4
115°	154.4	154.4	162.6	182.7	201.0	208.3	199.2	189.1	181.8	178.2	180.0
117.5°	152.6	155.3	157.1	168.1	180.0	185.5	180.9	167.2	161.7	159.9	157.1
120°	141.6	141.6	143.4	148.9	155.3	158.1	156.2	147.1	142.5	141.6	139.8
122.5°	126.1	127.0	126.1	128.8	133.4	136.1	134.3	127.0	125.2	125.2	123.3
125°	110.6	110.6	109.6	111.5	114.2	113.3	114.2	110.6	109.6	109.6	108.7
127.5°	99.6	98.7	96.8	97.8	98.7	98.7	99.6	95.9	96.8	97.8	96.8
130°	88.6	88.6	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8	87.7
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	75.8	74.9	76.7	78.6	78.6
135°	70.4	70.4	67.6	68.5	68.5	67.6	68.5	67.6	69.4	70.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9	65.8
140°	58.5	58.5	57.6	57.6	56.6	57.6	57.6	57.6	58.5	59.4	59.4
142.5°	55.7	54.8	53.9	53.0	53.9	53.9	53.9	53.0	53.9	55.7	55.7
145°	51.2	51.2	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2	52.1
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4	49.3
150°	47.5	46.6	45.7	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6
152.5°	44.8	44.8	43.9	44.8	43.9	43.9	43.9	43.9	43.9	44.8	45.7
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	42.0
160°	40.2	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	41.1
162.5°	39.3	39.3	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	40.2
165°	39.3	38.4	38.4	38.4	37.5	37.5	37.5	37.5	38.4	39.3	38.4
167.5°	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	38.4
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5
172.5°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
175°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	36.5
177.5°	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)