

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: P833693

Luminaire Tested: **TTN-D2-830-U-WQ-CG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833693
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-WQ-CG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5032.8 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B2 - U4 - G1

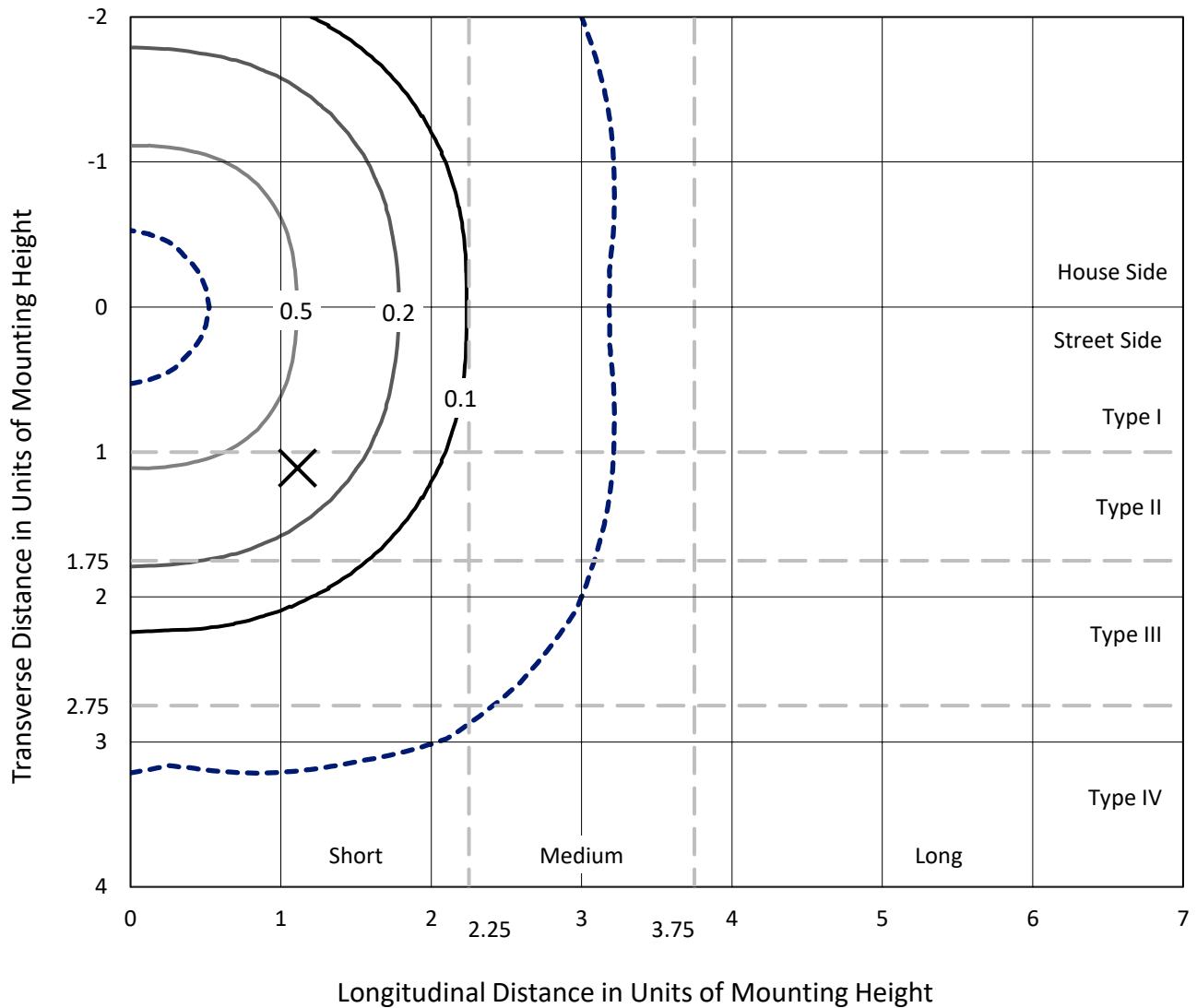
Input Watts (W): 47
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P833693
 CATALOG NUMBER: TTN-D2-830-U-WQ-CG-UPL2

Iso-Footcandle Lines of Horizontal Illumination

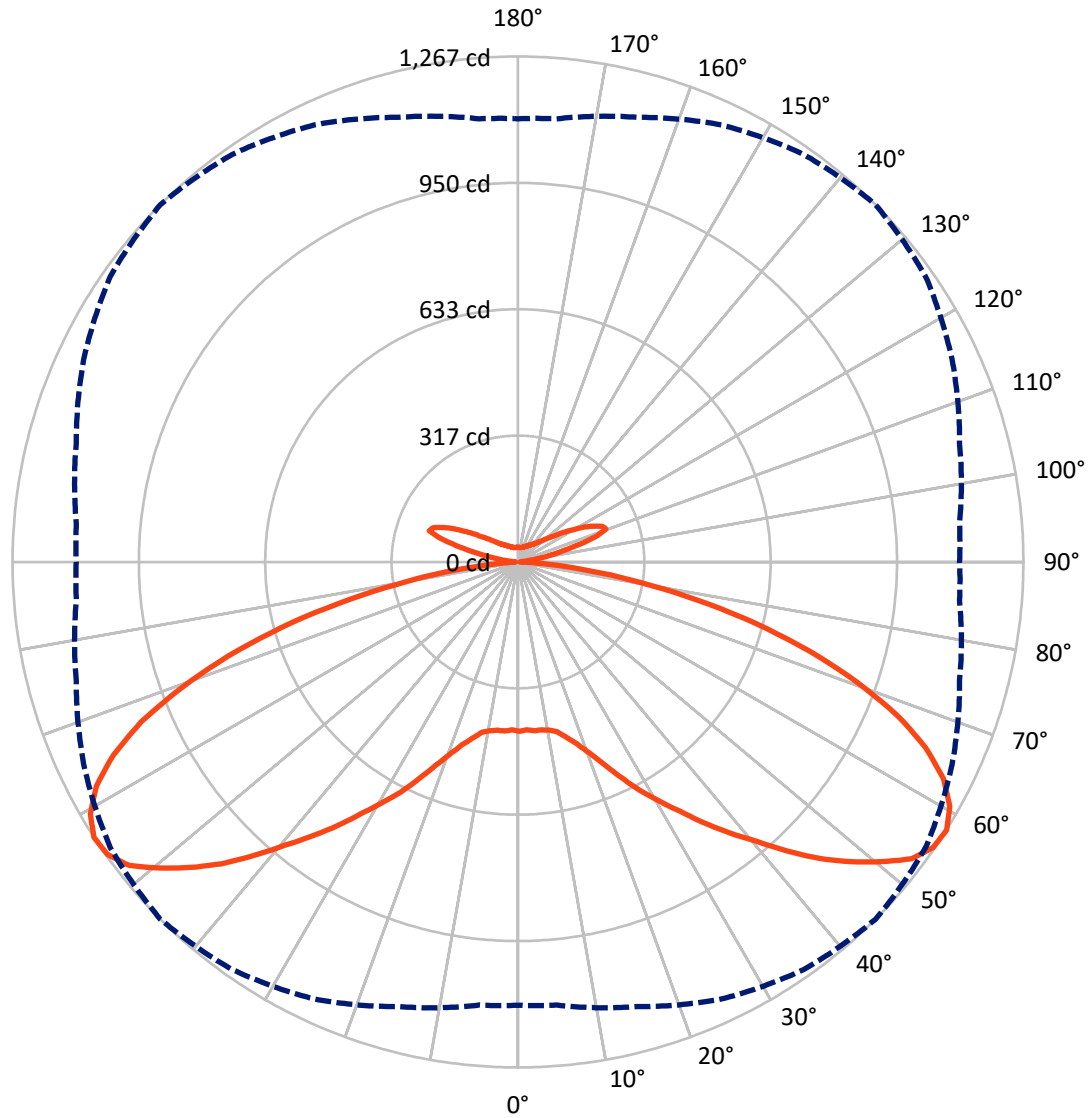
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Short - N/A

REPORT NUMBER: P833693
CATALOG NUMBER: TTN-D2-830-U-WQ-CG-UPL2

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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 CATALOG NUMBER: TTN-D2-830-U-WQ-CG-UPL2

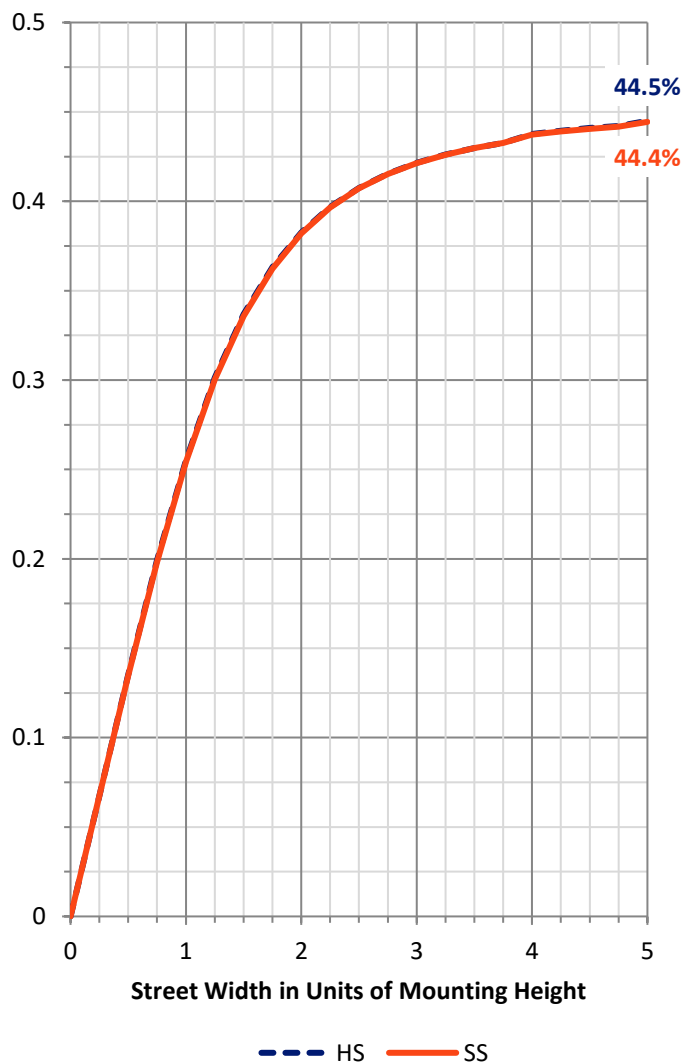
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2249.4	267.0	2516.4
	% Fixture	44.7	5.3	50.0
Street Side	Lumens	2249.4	267.0	2516.4
	% Fixture	44.7	5.3	50.0
Total	Lumens	4498.7	534.0	5032.8
	% Fixture	89.4	10.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	0.8
10°-20°	131.0	2.6
20°-30°	275.6	5.5
30°-40°	496.9	9.9
40°-50°	789.9	15.7
50°-60°	1053.9	20.9
60°-70°	1018.3	20.2
70°-80°	590.1	11.7
80°-90°	102.4	2.0
90°-100°	11.9	0.2
100°-110°	121.1	2.4
110°-120°	177.1	3.5
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°	4498.7	89.4
0°-180°	5032.8	100.0

Coefficient of Utilization

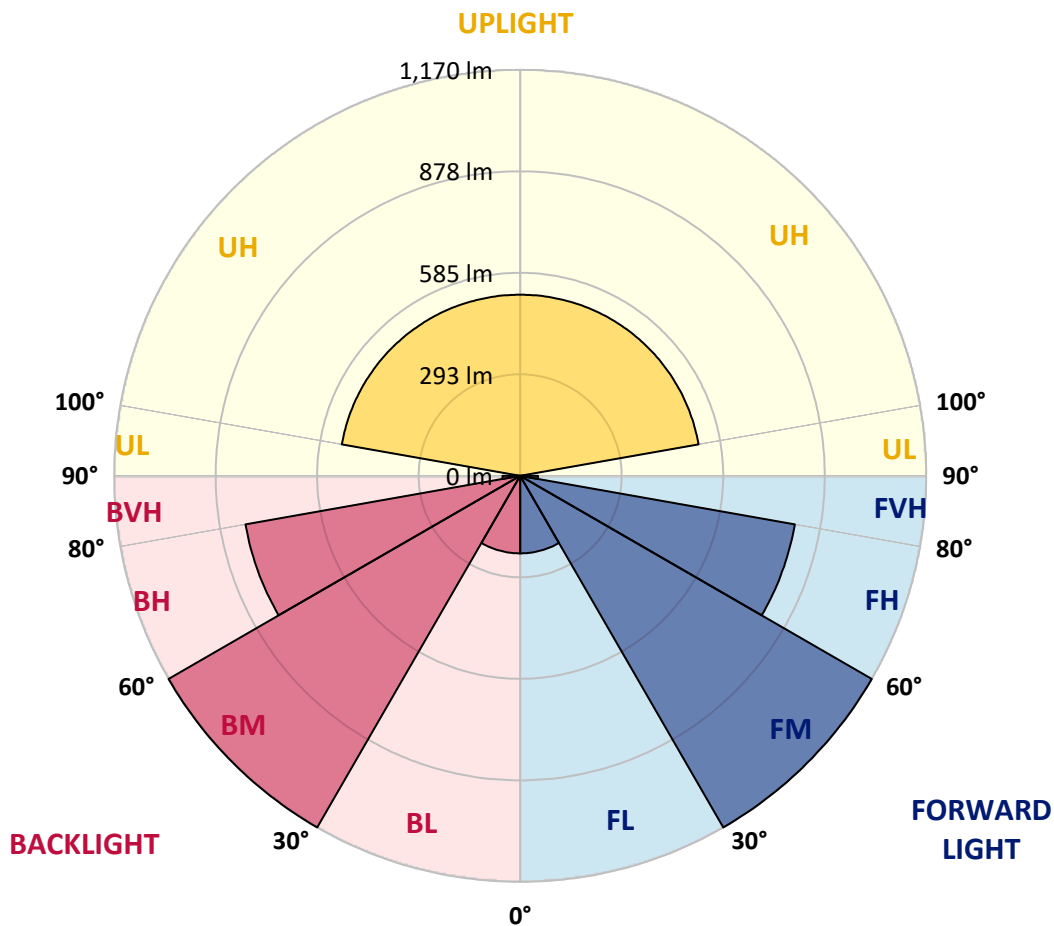


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	223.6	4.4			
FM (30°-60°)	1170.4	23.3			
FH (60°-80°)	804.2	16.0			G1/1800
FVH (80°-90°)	51.2	1.0			G1/100
BL (0°-30°)	223.6	4.4	B1/500		
BM (30°-60°)	1170.4	23.3	B2/2500		
BH (60°-80°)	804.2	16.0	B2/1000		G1/1800
BVH (80°-90°)	51.2	1.0			G1/100
UL (90°-100°)	11.9	0.2		U2/50	
UH (100°-180°)	522.1	10.4		U4/1000	

BUG Rating: B2-U4-G1
 Type V Short





REPORT NUMBER: P833693

CATALOG NUMBER: TTN-D2-830-U-WQ-CG-UPL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9
2.5°	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0
5°	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9
7.5°	421.0	421.0	424.9	424.9	424.9	424.9	424.9	424.9	424.9	421.0	421.0
10°	424.9	424.9	424.9	428.8	428.8	428.8	428.8	428.8	424.9	424.9	424.9
12.5°	432.7	432.7	436.6	436.6	436.6	436.6	436.6	436.6	436.6	432.7	432.7
15°	452.2	452.2	452.2	456.1	456.1	456.1	456.1	456.1	452.2	452.2	452.2
17.5°	471.7	471.7	475.6	475.6	479.5	479.5	479.5	475.6	475.6	475.6	475.6
20°	499.0	499.0	502.9	502.9	506.8	510.7	510.7	506.8	502.9	502.9	502.9
22.5°	534.1	538.0	538.0	538.0	541.9	549.7	545.8	541.9	538.0	538.0	538.0
25°	576.9	580.8	584.7	584.7	588.6	596.4	596.4	584.7	584.7	584.7	584.7
27.5°	627.6	631.5	635.4	635.4	639.3	647.1	643.2	635.4	635.4	631.5	631.5
30°	674.4	678.3	682.2	686.1	690.0	693.9	693.9	686.1	682.2	678.3	674.4
32.5°	721.2	721.2	729.0	736.8	744.6	744.6	748.5	736.8	729.0	721.2	717.3
35°	768.0	771.9	775.8	787.5	799.1	803.0	799.1	787.5	775.8	768.0	768.0
37.5°	818.6	822.5	826.4	842.0	853.7	861.5	853.7	842.0	826.4	818.6	814.7
40°	873.2	877.1	881.0	900.5	912.2	920.0	908.3	896.6	881.0	873.2	869.3
42.5°	923.9	931.7	939.5	962.9	982.4	990.2	978.5	959.0	943.4	923.9	920.0
45°	986.3	994.1	1005.8	1029.1	1048.6	1060.3	1044.7	1025.3	1001.9	986.3	982.4
47.5°	1036.9	1044.7	1056.4	1087.6	1114.9	1122.7	1107.1	1083.7	1052.5	1033.0	1029.1
50°	1075.9	1083.7	1107.1	1142.2	1173.4	1181.2	1165.6	1134.4	1099.3	1072.0	1068.1
52.5°	1107.1	1114.9	1142.2	1189.0	1224.1	1235.8	1216.3	1181.2	1134.4	1103.2	1099.3
55°	1122.7	1126.6	1161.7	1212.4	1247.5	1263.0	1243.6	1204.6	1153.9	1118.8	1114.9
57.5°	1111.0	1114.9	1153.9	1208.5	1247.5	1266.9	1247.5	1200.7	1146.1	1111.0	1107.1
60°	1087.6	1087.6	1122.7	1185.1	1231.9	1243.6	1224.1	1177.3	1118.8	1083.7	1079.8
62.5°	1044.7	1040.8	1083.7	1138.3	1185.1	1196.8	1181.2	1134.4	1075.9	1040.8	1036.9
65°	962.9	955.1	1017.5	1068.1	1111.0	1122.7	1111.0	1068.1	1013.6	959.0	951.2
67.5°	865.4	853.7	912.2	970.7	1009.7	1025.3	1009.7	974.6	912.2	857.6	853.7
70°	764.1	752.4	799.1	849.8	892.7	900.5	884.9	849.8	791.4	756.3	756.3
72.5°	643.2	631.5	674.4	713.4	756.3	764.1	748.5	717.3	674.4	639.3	635.4
75°	510.7	499.0	538.0	569.2	612.0	615.9	608.1	573.0	538.0	502.9	502.9
77.5°	378.1	366.4	397.6	424.9	460.0	460.0	456.1	428.8	397.6	374.2	374.2
80°	249.5	241.7	269.0	280.7	311.9	311.9	308.0	288.5	265.1	249.5	245.6
82.5°	140.3	132.5	155.9	159.8	183.2	183.2	179.3	163.7	148.1	136.4	136.4
85°	54.6	46.8	62.4	66.3	78.0	78.0	74.1	70.2	58.5	50.7	50.7
87.5°	3.9	3.9	7.8	7.8	11.7	11.7	11.7	7.8	7.8	3.9	3.9
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)